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

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

Date: 15 July 2011

TRANSPORT AND WORKS ACT 1992

TOWN AND COUNTRY PLANNING ACT 1990

ACQUISITION OF LAND ACT 1981

**THE CHILTERN RAILWAYS (BICESTER TO OXFORD IMPROVEMENTS)
ORDER 201[X]**

**REQUEST FOR A DIRECTION UNDER SECTION 90(2A) OF THE TOWN AND
COUNTRY PLANNING ACT 1990**

**APPLICATION FOR AN EXCHANGE LAND CERTIFICATE UNDER SECTIONS 19
AND 28 OF THE ACQUISITION OF LAND ACT 1981**

Dates of Inquiry: 2 November 2010 to 28 January 2011

Ref: TWA/10/APP/01

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CASE DETAILS

1 Purpose

- The Order would enable The Chiltern Railway Company Limited to carry out works to the railway between Oxford and Bicester, and construct a new length of railway to connect the Oxford-Bicester line to the Bicester-London line so as to enable through trains to run from Oxford station to London (Marylebone) station.

2 The Chiltern Railways (Bicester to Oxford Improvements) Order 201[X]

- This Order is drafted under section 1 of the Transport and Works Act. The application for the Order was made to the Secretary of State for Transport on 6 January 2010. If made it would authorise The Chiltern Railway Company Limited to construct and operate works and to compulsorily acquire land and rights in land for the purpose stated at 1 above.

Summary of Recommendation: That the Order should not be made.

3 Request For Deemed Planning Permission

- Application was made on 6 January 2010 for a direction granting deemed planning permission subject to conditions for the Works that are the subject of the Order, and for other measures associated with those Works.

Summary of Recommendation: That no Direction should be given in respect of Deemed Planning Permission.

4 Application for an Open Space Certificate

- Application was made to the National Unit for Land Acquisition and Disposal on 29 January 2010 for the Secretary of State for Communities and Local Government to issue a Certificate under section 19 of, or paragraph 6 of Schedule 3 to, the Acquisition of Land Act 1981.
 - **Summary of Recommendation: That no Open Space Certificate should be issued.**
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1 PREAMBLE

- 1.1 On 2 November 2010 I opened concurrent local public inquiries ("the Inquiry") at the Conference Centre Oxford, Park End Street, Oxford OX1 1JD to hear representations and objections regarding an application by The Chiltern Railway Company Limited ("Chiltern") to the Secretary of State for Transport to make an Order and grant deemed planning
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permission, and an application by Chiltern to the Secretary of State for Communities and Local Government for an Open Space Certificate, all as described in the Case Details. The Inquiry sat for 31 days and closed on 28 January 2011.

- 1.2 A pre-Inquiry meeting was held at the Inquiry venue on Tuesday 7 September 2010. Document X/5 presents a note of the meeting. Before and during the Inquiry I made unaccompanied visits to various locations which were the subject of representations to the Inquiry, and I also rode on the train between Bicester Town station and Oxford station on several occasions. After the Inquiry, on 2 February 2011, I made an accompanied site visit to all locations identified to me by parties at the Inquiry as being of particular relevance to specific parts of the evidence given at the Inquiry.

Purpose and Scale of the Proposal

- 1.3 The applicant's Statement of Aims under Rule 10(2)(c) reports that the key objectives and aims of the proposal ("the Scheme") are:

- To increase rail capacity on the Oxford-London corridor;
- To provide improved access to the rail network for Oxford and north Oxfordshire;
- To provide a sustainable alternative to the car, particularly for commuting journeys into Oxford;
- To help deliver public policies for economic and spatial development;
- To facilitate the East West Rail Link;
- To extend the use of an environmentally-friendly and safe form of transport; and,
- To facilitate the redevelopment of Oxford Station.

- 1.4 The Scheme proposes approximately 20.74 kilometres of new or upgraded railway between the Birmingham to London (Marylebone) line near Bicester, and Oxford railway station. Accommodation works on the railway would be undertaken and existing level crossings would be closed. Rights of way would be diverted. A new station would be built near the Water Eaton park and ride site, and that site would be enlarged.

Number of Objectors

- 1.5 During the Inquiry, 35 objections to the Order were withdrawn. At the end of the Inquiry there remained 285 objections.

Main Grounds for Objection

- 1.6 The main grounds for objection to the draft Order were that, in the view of objectors:
- a) Trains using the Scheme would cause undue harm at nearby properties by virtue of noise, vibration or both.
 - b) Closure of level crossings associated with the Scheme would give rise to unduly inconvenient alternative routes.
 - c) The effect on wildlife and wildlife sites would be unacceptable.

- d) The proposed development in the Green Belt would, on balance, be unjustifiably harmful.

Statutory Formalities

- 1.7 Chiltern Rail confirmed that it had complied with all necessary statutory formalities. Document CRCL/INQ/4 provides details.

Written Representations

- 1.8 In addition to submissions by those who appeared at the Inquiry, there were 271 written representations before the Inquiry at its close. They include 35 statements of support, 225 objections and 11 other representations.

Scope of this Report

- 1.9 This report contains a brief description of the site and its surroundings, a report of procedural matters raised at the Inquiry, the gist of the evidence presented and my conclusions and recommendations. Lists of inquiry appearances and documents are attached. Proofs of evidence and other statements by the parties are identified; these may have been added to or otherwise extended at the Inquiry, either during examination in chief or cross examination.

2 DESCRIPTION OF THE SITE AND ITS SURROUNDINGS

- 2.1 Figure 2.1 of the Environmental Statement (Volume 3) (document CD1.17) shows the scheme boundary against a background of Ordnance Survey mapping of the area between central Bicester and central Oxford.
- 2.2 The Scheme would alter the railway system in this area and so I start with a brief description of that system. Oxford station is a short walk to the west of the City centre. The railway at Oxford runs broadly on a north-south axis. To the south the railway goes to Didcot, where it meets the main line between London (Paddington) and Swindon. About 1.5 kilometres to the north of Oxford station a branch leaves the main line (at Oxford North Junction) and turns north-east toward Bicester. That route is the subject of the current application. The main line continues northwards through Wolvercote (a suburb of Oxford) and under the A34 Oxford bypass and the A40 main road to a junction in the railway. From that junction trains pass to and from Banbury, in the north, or along the Cotswold line, to the north west.
- 2.3 Bicester is served by two distinct railways. The first is a main line and passes through the town at high level (on bridges and embankments) on its way between Banbury and London (Marylebone). This railway runs broadly north-west to south-east through the town, and Bicester North station gives access to it. The second railway in Bicester is a continuation of the Bicester branch from Oxford which I have previously described. It runs at ground level (or very nearly) through the town from its north-eastern side to the south side of the town. Bicester Town station, east of the town centre and just south of London Road, is served by this railway. There is no railway connection in Bicester between the town's two railways. London Road connects the town centre with the main A41 road to Aylesbury, and the low-level railway crosses London Road at a level crossing. Bicester Town station has a single platform and is the north-eastern terminus for the only passenger service on this line,

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- a shuttle service to Oxford (calling also at Islip, the intermediate station on the route). The line is single track, and continues through Bicester beyond the London Road level crossing and the town limits into open country, at least as far as Bletchley. Freight trains use the line to travel from Oxford and some go beyond Bicester.
- 2.4 The two railways in Bicester cross at a point several hundred metres to the north-east of Bicester Town station, with the main (London) line bridging over the other railway. The Scheme proposal would provide a connection near this point, by means of a new length of railway (a "chord") that would branch from the London line and descend the embankment while turning to meet the existing low-level line. Alterations would be made to the railway between the new chord and Oxford station. The land needed for the chord is part of a body of undeveloped land which lies between the London line and Gavray Drive. Beyond that lies a residential area, bounded to the north-east by Gavray Drive, to the south-east by Charbridge Lane (part of the Bicester ring road), to the south-west by London Road and by the low-level railway on its north-western side. The northernmost part of that residential area is known as Whimbrel Close, close to which the chord would meet the existing railway route.
- 2.5 An industrial estate lies to the north of the London line, and a public footpath FP 129/3 crosses the undeveloped land between Gavray Drive and the railway, and then continues beneath the London railway and on to the industrial estate.
- 2.6 Between Whimbrel Close and London Road, the route passes between mixed development on the north-western site and residential development to the south east. These are connected by Tubbs Lane crossing, a level crossing for pedestrian use approached on each side by the urban footpath FP 129/3. Garth Park, a public playing field, is to the west of the railway and the south of the footpath here.
- 2.7 The railway corridor then crosses the B4100 London Road at a level crossing and enters Bicester Town station, whose single platform stands on the north-western side of the railway. The station and some nearby employment sites are served by Station Approach, and the Talisman Road employment site is on the opposite side of the railway. Bicester Shopping Village, a retail development, is to the west of the railway between the town and the main A41 road. The Shopping Village and its associated car park have expanded since the Ordnance Survey mapping was surveyed that forms the basis of the Deposited Plans and the Planning Direction Drawings. The A41 is elevated to pass over the railway on a bridge, south of which the railway is in open country. From here to the approach to Wolvercot tunnel, on the fringe of Oxford, the land is largely level or subject to only very gentle gradients (although there is a cutting at Islip) and the alignment of the railway is correspondingly even.
- 2.8 A few hundred metres south of the A41 bridge a siding leaves the railway and turns to the south-east to enter an extensive military depot known as Graven Hill.
- 2.9 South of the military siding, the railway reaches the first of numerous
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- other level crossings that the Scheme would affect. Alchester House is close to the railway here, on the eastern side, and screened from it by a high hedge. Here the railway is crossed by Langford Lane, which leads from other public roads to the west of the railway to Wendlebury Gate stables and to a gate (apparently little-used) in the perimeter fence of the military depot. The public right of way turns abruptly to the south-east at Wendlebury Gate, and continues as a public bridleway and private access road towards Merton Grounds.
- 2.10 The railway then passes the site of the Roman town of Alchester and, several hundred metres off to the west, the village of Wendlebury. The M40 motorway passes on a bridge over the railway. About a kilometre to the south-west the line is crossed by Mansmoor Road (a bridleway and private access road), at the Holt Farm level crossing. This area is known as Otmoor, and Charlton-on-Otmoor village is rather more than a kilometre to the south-east of the railway here. Passing Oddington Grange and Brookfurlong Farm (both on the western side of the track) the route draws in to Islip station with its single platform and car park, with access from Bletchingdon Road. Much of Islip is on higher ground than the countryside crossed by the railway, and the railway enters a cutting here which it leaves on the south-western side of the village (crossing Mill Lane at a level crossing) where the land falls toward the confluence of the Ray and Cherwell rivers.
- 2.11 Water Eaton is a settlement a few hundred metres south and east of the railway, to the west of which is a park and ride car park from which buses to Oxford may be caught. Here the railway is close to the A34 trunk road, which connects Oxford with junction 9 on the M40 (for Bicester) and which continues southwards as a bypass of Oxford, passing north and west of the city. A railway siding serves an aggregates depot near the park and ride site and a multi-storey concrete-framed former grain silo is also to be found here. The A4165 road passes over the railway on a bridge here, a continuation of Banbury Road in Oxford (from the south) and the A4260 road north through Kidlington and on in the direction of Banbury.
- 2.12 Here the railway turns to a more closely north/south alignment and passes the North Oxford Golf Course. Lakeside is a residential street and the rear gardens of properties there abut the railway on its eastern side and lie some 1 or 2 metres below the level of the rails. Another park and ride car park, known as Peartree, is on the other side of the railway. Beyond Lakeside the railway enters a cutting as it approaches Wolvercot tunnel, which passes beneath the traffic roundabout at the junction of the A44 and A40 roads and the A4144 Woodstock Road. The line continues in a cutting through residential Upper Wolvercote (sic), is bridged by the road known as First Turn and passes between houses and flats and a primary school in St Peter's Road (to the west) and other dwellings to the east (Blenheim Drive and others). The line then emerges into the open at Wolvercote Common and passes over the Oxford Canal to meet the main railway out of Oxford.
- 2.13 The route then continues southward toward Oxford station. To the east of the railway the land is largely in residential use. To its west is Port Meadow, which has the appearance of a flood plain of the nearby Thames

Comment [RJF1]: See
Streetmap.com :

<http://tinyurl.com/3jnh3nl>

and on part of which, opposite Aristotle Lane, the Trap Ground allotment gardens have been formed. Walton Well Road gives access over the railway from the residential area to the east to a car park near the southern end of Port Meadow, some 500 metres south of the Trap Ground allotments. Further south, houses on the east side of the railway are served by Rewley Road. The Sheepwash Channel, also known as the Rewley Abbey Stream, connects the Thames with the Oxford Canal and was formerly crossed by a swing bridge that carried a railway. The tracks that the swing bridge served have been lifted but the bridge itself remains, just off Rewley Road and close to the route of the railway that the Scheme would provide. The Scheme would terminate on the eastern side of Oxford station, to the north of the station building and concourse.

3 **PROCEDURAL MATTERS**

3.1 **Costs Application**

- 3.1.1 A costs application was made at the Inquiry on behalf of Mrs G Walker against Chiltern Rail. The application is the subject of a separate report.

3.2 **Planning Policy**

PPG13

- 3.2.1 During the Inquiry the Government issued a revised version of Planning Policy Guidance 13 *Transport* (document X/14). There was no contention by any party that the changes made to PPG13 had any bearing on matters relevant to this Inquiry, and it seems to me that they do not.

Regional Planning Policy

- 3.2.2 Regional planning policy was the subject of representations made at the Inquiry. On 6 July 2010 the revocation of Regional Strategies was announced with immediate effect. The decision behind that announcement was then subject to challenge in the Cala Homes (South) Limited case, and that challenge was decided on 10 November 2010 (document CRCL/INQA/20). The outcome was to quash the 6 July revocation. The Secretary of State issued a written Ministerial statement on 10 November which, together with other documents issued at the same time, became the subject of a further legal challenge to the Secretary of State by Cala Homes (Cala 2), as part of which Cala Homes asked the Court to grant an interim stay against the documents issued by the Secretary of State. On 3 December 2010 the Court decided that there should be no stay, and made an interim order. An application for judicial review remained.

- 3.2.3 In considering regional planning policy, I therefore regard the Regional Strategy as part of the development plan on an ongoing basis. I note that the abolition of Regional Strategies remains a Government Commitment that the Secretary of State considers to be a material consideration where relevant. I note too that at the time the Inquiry closed the lawfulness of this position was subject to challenge.

3.3 **Applications for Adjournment**

Relating to an Appropriate Assessment

- 3.3.1 On day 27 of the Inquiry (14 January 2011) Mr S Feeney (objector number 123) made his opening submissions, which were put orally.

Those submissions included the following application for an adjournment.

- 3.3.2 The Inspectors' report on the examination into the Oxford Core Strategy development plan document had been published on 21 December 2010 (document 123/2). Appendix B of that document identifies changes that the Inspectors consider are needed to make the plan sound. One of those, IC10 (page 66), relates to a development proposal known as the Northern Gateway: "To meet the requirements of the Habitat Regulations any Masterplan for the area will need to be informed by an Appropriate Assessment of the potential hydrological and air quality impact on the Oxford Meadows SAC." The Core Strategy had yet to be adopted by Oxford City Council. The European Court of Justice has made it clear that land use plans must be subject to Appropriate Assessment if they might have an effect on the integrity of a Special Area of Conservation. Document Obj123/5 is a Natura 2000 standard data form for the Oxford Meadows SAC, and formed part of the applicant's evidence, but it should be updated in the light of the emerging Core Strategy to provide a proper baseline for the Appropriate Assessment of the Scheme. There should be documentary evidence of a joint Appropriate Assessment of the effects of the Core Strategy/Northern Gateway and the Scheme on the SAC, but that had not been done and so the Secretary of State's Matter 8 would not be properly addressed. The matter of an Appropriate Assessment of the Core Strategy/Northern Gateway had been considered during the examination of the Core Strategy by Oxford City Council, Natural England and the Berkshire, Buckinghamshire and Oxfordshire Wildlife Trust (document Obj123/3). Time should be allowed at the Scheme Inquiry for those bodies to attend to address the matters Mr Feeney identified. And consideration should be given to the need for further time pending a suggested judicial review of the Oxford Core Strategy.
- 3.3.3 Chiltern replied that Mr Feeney's application relies on Regulation 102 of the Conservation of Habitats and Species Regulations 2010 (document CD/5.30), which requires an Appropriate Assessment, relating to land use plans, by the plan-making authority; and that was what the Core Strategy Inspectors had required. But the Scheme should be considered under Regulation 61. Although Regulation 61 refers to "other plans or projects" the Core Strategy land use plan was neither a plan nor a project. In the terms of Regulation 61, there is no plan or project by others likely to have a significant effect on the SAC, and Chiltern's traffic assessment had considered the overall effects of development mooted in the area. The Secretary of State, as competent authority, would be able to consider all significant effects. No more time would be needed to assemble the material needed for the Secretary of State to undertake an Appropriate Assessment.
- 3.3.4 Both parties considered that any additive effect the Scheme might have that might figure in an Appropriate Assessment would be an important consideration. Chiltern undertook to prepare a summary of its evidence in that regard (which was subsequently submitted as document CRCL/INQ/72) in time for Mr Feeney to consider before his return to the Inquiry at a later date.
- 3.3.5 To my mind, Regulation 61 sets out the framework within which any necessary Appropriate Assessment of the Scheme should be undertaken.

The evidence of Chiltern was that sufficient information was available for an Appropriate Assessment to be properly conducted and it seemed to me that the Secretary of State would be able, in due course, to reach a view on that submission. Neither Oxford City Council nor Natural England had chosen to appear at the Inquiry, but instead pursued their objections by written representations; and the Wildlife Trust had appeared at the Inquiry on 5 January and gave evidence about the Scheme's effect on the SAC. This appearance of Mr Feeney fell on the day before a week-long adjournment of the Inquiry, and he continued to present his case upon resumption. There was no need for the additional adjournment Mr Feeney sought.

Relating to Preparation Time

- 3.3.6 Document CRCL/INQ/72 was prepared at my request made during the appearance at the Inquiry of Mr Feeney on 14 January. It was issued during the week-long adjournment that followed, and was formally received at the Inquiry upon resumption on Tuesday 25 January. On that day Mr Feeney asked for more time to consider the document, which he had received toward the end of the previous week. He referred to his disabilities (he had previously told the Inquiry he suffers from lower back pain and repetitive strain injury) and to his lack of legal representation. Having made allowance for Mr Feeney's disabilities, I nevertheless concluded that the time available had been sufficient for the new evidence to be considered by Mr Feeney, and that there was no prejudice to Mr Feeney's case as a result of the delivery of the document to him. No additional time was needed.

Relating to Information Availability

- 3.3.7 On day 30 of the Inquiry (27 January 2011) Mr Feeney made his closing submissions, which were put orally and in writing (Obj 123/25). The failure of Chiltern and that of Natural England each to enter into evidence documentation of their scientific advice regarding effects the Scheme may have on the Oxford Meadows SAC is a breach of the Habitats and Species Directive (to which regard must be had by the competent authority) and that therefore the Order application must be refused or the Inquiry should be adjourned to allow more evidence to be submitted and considered. Mr Feeney identified six topics in respect of which he considered Chiltern's evidence to be lacking. Chiltern confirmed to me at the Inquiry that, even if more time were allowed, they would bring no more evidence in respect of the matters raised by Mr Feeney. Nothing from Natural England indicated any intention on their part to do so in the same circumstance.
- 3.3.8 Mr Feeney's submission was that either the Order application should be refused, or that I should adjourn the Inquiry as allowed by Rules 18(9) and 18(12). The adjournment would allow further evidence to be submitted, further public consultation, and further representations from any party.
- 3.3.9 Of Mr Feeney's six topics, five were elements of evidence that Mr Feeney considered necessary for the Inquiry, but were not among Chiltern's evidence. It seemed to me (document X/16) that the absence of information from Chiltern's case was not a new document or matter that

triggered Rule 18(9)'s requirement for parties to have an opportunity to consider. The sixth topic was a map that shows the location of the Hay Meadow habitat. This illustrates material that had previously been available since proofs of evidence were first issued. The map was put before the Inquiry on 25 January, more than one day before Mr Feeney and others made their closing submissions. There had been several months for parties to examine the evidence illustrated by the map, and over a day to consider the map itself, and this seemed to me sufficient time.

- 3.3.10 I therefore concluded that no adjournment was necessary in respect of this matter.

Relating To The Attendance of Natural England

- 3.3.11 Natural England chose to put their objection to the Inquiry by written representations.
- 3.3.12 On Day 30 of the Inquiry, Mr Feeney asked (Obj123/25) that the Secretary of State should exercise his discretionary power under Rule 15(1) (Transport and Works (Inquiries Procedure) Rules 2004) to request the attendance of Natural England at the Inquiry so that their evidence could be tested by cross-examination. He was supported in this by Mrs Harris, a statutory objector. Chiltern had given no indication of any wish to examine Natural England. Rule 15(1) requires such requests for attendance to be issued not later than 4 weeks before the date fixed for the holding of the Inquiry. That requirement could not be satisfied at the time of Mr Feeney's request, even if the Secretary of State were minded to do so. I told Mr Feeney I would take no further action in respect of his request.

Relating to Various Matters

- 3.3.13 Mrs R Harris (Objector 213) is a statutory objector. Mrs Harris made a written submission on 28 January 2011 (document Obj/213/9) in which she says that she had not had enough time to respond to various issues relating to her objection. Reference was made to document CRCL/INQ/81, the Noise and Vibration Mitigation Policy, and the amended draft Order.
- 3.3.14 Document CRCL/INQ/81 was issued to the Inquiry on 27 January 2011. It augments paragraphs 4.11 to 4.17 (inclusive) of document CRCL/INQ/61 and adds some technical details of a lighting installation whose function is described in detail in CRCL/INQ/61. CRCL/INQ/61 was before the Inquiry from 16 December 2010. I am satisfied that sufficient time was available for parties to consider this document.
- 3.3.15 The Noise and Vibration Mitigation Policy was available in its original form as document CD/1.29 from the first day of the Inquiry (2 November). At the start of business on 26 January, Chiltern introduced a revised version, marked CD/1.29/1. The text changes are marked. On 27 January, Chiltern introduced a further revision, marked CD/1.29/2. The further text changes are marked. The changes are few, and minor. I am satisfied that sufficient time was available for parties to consider each version of this document.
- 3.3.16 At the start of the Inquiry and on 27 January, Chiltern issued suggested

changes to the Order. At the same times, versions of the Order were also provided (CRCL/INQ/6 and CRCL/INQ/6/1) in which the suggested changes were highlighted, and the reasons for the proposed changes are set out in documents CRCL/INQ/5 and CRCL/INQ/5/1. Many of the changes proposed on 27 January had previously been proposed on 2 November; thus, for example, a person aggrieved by the proposed changes to articles 25(2) to 25(4), or article 27, had several months to raise the matter at the Inquiry. Other suggested changes to the draft Order are as described in document CRCL/INQ/5/1. In view of the guidance in the documents provided, I am satisfied that sufficient time was available for parties to consider each version of this document, and to do so in conjunction with the other documents mentioned by Mrs Harris.

3.4 Document CRCL/INQ/1/1

- 3.4.1 At the start of the day's business on Day 31 (09:30 on 28 January) Chiltern submitted document CRCL/INQ/1/1, headed "Status of Objectors, Representors and Supporters". It was accompanied by several lever arch files of correspondence and other papers. I announced that I accepted this material as a written representation. Copies had been placed in the Inquiry library earlier that day and were viewed by individual objectors during the day. Before closing the Inquiry, at 15:26 on that day, I asked whether any party wished to be heard, and there was no response from those objectors or from any other party then present. This report draws on document CRCL/INQ/1/1 and its files only in paragraphs 8.21.11 and 8.21.12, which report the existence of items of correspondence recorded in document CRCL/INQ/1/1, and nothing in my conclusions and recommendations draws on any evidence newly raised in document CRCL/INQ/1/1 or the files submitted with it. I am satisfied that no party was prejudiced as a result.

3.5 Statutory Undertaker's Land: British Waterways Board

- 3.5.1 BWB put its case to the Inquiry wholly by written representations. Document Obj 214/2 includes, at paragraph 10.2, the following submission:

Pursuant to section 17 of the Acquisition of Land Act 1981, as applied to the proposed Order by section 12(1) of the Transport and Works Act 1992, as parcels 27002, 27003 and 27004 comprise land which belongs to BWB for the purpose of its statutory undertaking, any Order which authorises compulsory purchase of this land will be subject to special Parliamentary procedure unless BWB's objection is withdrawn.

- 3.5.2 BWB's objection was not withdrawn at the Inquiry.
- 3.5.3 Chiltern's reply is at paragraphs 3.43 and 3.44 of document CRCL/R/OBJ214:

Chiltern Railways does not intend to acquire Oxford Canal, the bed, hedge or towpath and it is not envisaged that the works will prevent the Objector (BWB) from complying with its statutory obligations. Chiltern Railways does not consider that the access which is likely to be required over plots 27003 and 27004 will cause serious detriment to that land.

The proposed Protective Provisions provide that Chiltern Railways will not

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- exercise the powers of article 22 to acquire land without the consent of the Objector.
- 3.5.4 The proposed Protective Provisions are appended to an uncompleted draft agreement, dated 5 January 2011, produced by Chiltern (CRCL/R/Obj214 Appendix B).
- 3.5.5 If BWB's objection were not withdrawn, then it would remain for Chiltern to follow special Parliamentary procedure in respect of the interests identified by BWB.
- 3.6 **Creation of Brookfurlong Crossing**
- 3.6.1 Mr and Mrs Unwin's submission is set out in their solicitor's letter dated 6 August 2010 (obj 222). Their objection is elsewhere in this report (6.55.55). Their submission is summarised as follows. The Acts which authorised the railway ("the primary Acts") each incorporate the Railways Clauses Consolidation Act 1845 ("the 1845 Act"). Section 68 of the 1845 Act provides that the company shall make and maintain certain things, including such [things] ... over or under ... the railway as may be necessary to make good any interruptions caused by the railway to the use of the lands through which the railway shall be made. Mr and Mrs Unwin believe that their property and the access to it (now across Brookfurlong Crossing) existed before the railway (Obj 222/3). Clause 17 of the draft Order would extinguish Brookfurlong Crossing. The Secretary of State should give serious consideration to the duties imposed under the primary Acts, when considering whether sufficient justification has been given by Chiltern to extinguish this private accommodation crossing. If the crossing is not to be kept, then the Scheme should arrange that an equally convenient bridge or passage over or under the railway is provided and maintained in accordance with s68 of the 1845 Act.
- 3.6.2 Chiltern's response is in paragraph 3.8 of CRCL/R/OBJ222, taken from their letter of 27 May 2010. Chiltern is not aware of any evidence that the Brookfurlong Crossing was provided for in accordance with section 68 of the 1845 Act. In the absence of any such evidence it is not accepted that the Brookfurlong Crossing was preserved by the primary Acts. However, in any event, the Secretary of State has power under section 5 of the Transport and Works Act 1992 to include provision in a Transport and Works Order to repeal or amend statutory provisions of local application if it appears to him necessary or expedient to do so. Accordingly, assuming that there are any subsisting statutory rights or duties under section 68 of the 1845 Act applicable to Brookfurlong Farm Crossing (which Chiltern does not accept), article 17 of the draft Order as applied for would override them.
- 3.6.3 Furthermore, Chiltern say that s68 of the 1845 requires the making good of any "interruptions caused by the railway to the use of land through which the railway shall be made"; and here "the railway" is defined in section 3 of the 1845 Act so as to be the railway that now exists, that is, the railway authorised by the original Acts. Section 68 of the 1845 Act, as incorporated with the Order, does not apply because the railway is an existing railway and is not a new railway authorised by the Order.
- 3.6.4 The Secretary of State will no doubt reach his own view of these legal
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submissions. It seems to me that article 17 of the draft Order would override section 68 of the 1845 Act.

3.7 **Common Land at Port Meadow**

The gist of submissions by the Freemen of Oxford ("the Freemen") was as follows:

- 3.7.1 Port Meadow was first registered in 1967 by the City of Oxford Council as Common Land, under the 1965 Commons Registration Act. The Council did this because it was necessary for the registration to be made by a body corporate. The City Council is thus the registered owner (for the purposes of the Commons Registration Act) but not the legal owner. The only body of people to enjoy legal rights over Port Meadow is the Freemen of Oxford. The Oxfordshire Act of 1985 says: "For the avoidance of doubt it is hereby declared that the rights of common over Port Meadow and Wolvercote Common in the city, registered in the register of common land maintained by the county council under the Commons Registration Act 1965 in the names of the freemen of the city at the date of registration, are the rights of the freemen as such, being the persons who from time to time are entered in the roll of freemen of the city."
- 3.7.2 The extent of Registered Common is shown in figures COBB 1, COBB 2 and COBB 3 (Obj/314/1). Parcels 29007, 29014, 29009, 29010, 29011, 29012, 29013, 29015, 29018 and 30009 are each partly or wholly Registered Common Land. But the Book of Reference, the Planning Direction drawings, and the Environmental Statement Volume 3 fail to take notice of or refer to this. And there is no mention of Registered Common Land in Chiltern's Compliance Statement (CRCL/INQ/4), or in Schedule 3(6) of the Acquisition of Land Act 1981 (CD/5.6).
- 3.7.3 The Transport and Works (Applications and Objections Procedure) (England and Wales) Rules 2006 (CD/5.22) require through Schedule 6 para (9) (page 39) that application notices should be served on persons specifically named in relevant Acts of Parliament. By virtue of s14 of the Buckinghamshire Railways Act 1850 (CD/5.4, page 82) the Freemen are such a person. But they were not notified. The Application is not compliant.
- 3.7.4 Under section 38 of the Commons Act 2006 consent is generally needed from the Secretary of State for Environment, Food and Rural Affairs for any restricted works on registered common land. Restricted works in this context includes "resurfacing of land with tarmac and similar materials". Chiltern proposes to regrade the path from Aristotle Lane bridge onto Port Meadow, forming a series of surfaced "ramps" separated by "landings". Neither these steps nor a hard surface are appropriate on common land such as Port Meadow. The Freemen have a right to be consulted on these works, and they have not been. The proposal could be the subject of a separate Inquiry under the Commons Act 2006, but the Freemen reluctantly accept that the Commons Act can apparently be circumvented by the Transport and Works Act.
- 3.7.5 Chiltern is wrong to dismiss the rights of commoners to be served notice; they fail to acknowledge the particular status of the Freemen as beneficial owners, rather than as simple commoners.

3.7.6 The gist of Chiltern's reply was:

- a) Registered ownership: In giving notice of the application for an Order, Chiltern complied with the Transport and Works (Applications and Objections) (England and Wales) Rules 2006 ("the 2006 Rules"). The term "owner" is defined in Rule 4 as having the same meaning as in the Acquisition of Land Act 1981 (CD/5.6) ("the 1981 Act"). The definition in section 7 of that Act means a person entitled to dispose of the fee simple of the land, qualified as stated in that section. Oxford City Council is the registered owner of the Common and holds the legal title to Port Meadow. The Freeman claim only a beneficial interest in the common and are not "owners", entitled to service. Nevertheless, the general notice requirements of the Rules successfully brought the application to the attention of the Commoners. Even if there had been any non-compliance with the 2006 Rules (which Chiltern does not accept) no prejudice arose.
- b) Registered Common Land: Rule 12(8)(e)(i) of the 2006 Rules requires the Book of Reference to specify "land the acquisition of which is subject to special parliamentary procedure" under section 12 of the Transport and Works Act 1992. There is no additional requirement to identify land which is part of a registered common. The purpose of specifying the status of the land is simply to provide notice that the special safeguards under the 1981 Act, relating to the compulsory acquisition or creation of rights over the special categories of land protected under the 1981 Act, apply. The procedures and protection of paragraph 6 of Schedule 3 to the 1981 Act apply equally to common land and to open space. However, this is no longer relevant because Chiltern now does not seek to acquire permanent rights over Port Meadow. Plots 29007, 29010, 29012, 29013 and 29014 are all part of the public bridleway or the railway, so are not within the registered Common. Section 38(8) of the draft Order, if made, would authorise the proposed works to the bridleway.
- c) Service of notices: The requirements of the 2006 Rules and the 1981 Act have been met, and there is no other relevant procedural requirement.

3.7.7 The Secretaries of State will no doubt reach their own view of these submissions. For my part:

- a) I am satisfied that the Freeman have "rights of common" over Port Meadow, by virtue of the Oxfordshire Act of 1985, and that the Oxford City Council is the registered owner of the land [3.7.1]. For the reason given in 3.7.6a) I am satisfied that the Freeman are not, in the terms of the 2006 Rules, an "owner" of Port Meadow. As they are not an "owner" and as there is no contention that the Freeman are lessees, tenants or occupiers of Port Meadow it appears to me that there is no requirement in Rule 12(8) (2006 Rules) for the Freeman to be identified in the Book of Reference; and therefore no requirement under

Rule 15 for notice to be served on the Freeman.

- b) The Freeman addressed the Inquiry on its opening day (2 November 2010) and I agreed that they may make representations on a later, programmed occasion. This the Freeman subsequently did, on 15 December 2010, and they presented their closing submissions on 27 January 2011. I am satisfied that sufficient opportunity was afforded to the Freeman to make representations regarding the Scheme, and that no prejudice to their position resulted. Their representatives on 15 December expressed themselves content with the process.
- c) The Freeman's reference to Schedule 6 paragraph 9 of the 2006 Rules is erroneous, in that the requirement described by the Freeman does not appear in the Schedule.
- d) As regards the Freeman's points reported in paragraph 3.7.2 of this report, I find nothing that need bear greatly on the decisions of the Secretaries of State because:
 - i) I am satisfied, for the reason given in 3.7.6b), that there is no need for Common land to be identified in the Book of Reference;
 - ii) I am not satisfied that it is necessary for Common land to be identified in the Planning Direction drawings; and,
 - iii) Paragraph 5.4. of Volume 2 of the Environmental Statement says that "Port Meadow is also a "common" registered under the Commons Registration Acts." The point is recognised in the Environmental Statement.

3.8 **Mansmoor Road, Otmoor**

- 3.8.1 This is part of bridleway BW157/4, between Merton Road at Charlton-on-Otmoor and Holt's Farm level crossing. It is also used to give vehicular access to land in various ownerships. Evidence before the Inquiry refers to it, variously, as Mansmoor Road, Mansmoor Lane and Mansemoor Lane. The Deposited Plans identify it as Mansmoor Road, and I do the same.

3.9 **Document Obj 185/3**

- 3.9.1 This is one of the written representations of Mr Graham Honour and Mrs Nicky Honour. It refers to a meeting held on 12 October 2010 between Chiltern, Mrs Honour and others. In its rebuttal document CRCL/R/Obj185 (received at the Inquiry on 7 December), Chiltern says that the 12 October meeting was held on a "without prejudice" basis, and that document Obj 185/3 should therefore be disregarded. In their subsequent written submission Obj/185/4 (received at the Inquiry on 15 December) Mr and Mrs Honour do not mention that proposition but ask that their suggested alternative proposal, the subject of the 12 October meeting, be considered by the Secretary of State.
- 3.9.2 Chiltern raises no such objection when events at the same meeting are

described by Mr Paul Miller (6.55.59).

- 3.9.3 It is not for me to seek to shine a light on meetings between parties outside (or before) the Inquiry. Often such meetings can be helpful in resolving differences between parties, and it seems to me reasonable that applicants may wish to explore options with objectors, as Obj 185/3 records to have happened on 12 October. I find no reason to doubt that the views Chiltern expresses in its own evidence on options that were put to the Inquiry are the views of which Chiltern wishes the Secretaries of State to be aware. So far as is relevant to the matters before the Secretaries of State, I therefore take document Obj185/3 into account.

3.10 **The Eligibility of Buildings For Noise Insulation**

- 3.10.1 Mrs Harris refers to what she describes as a loophole (6.43.15) in that what I saw during my accompanied site visit to be a small outbuilding at her property is on land which would be acquired or used for the Scheme (plot 26016) and therefore her building is not an "eligible building" by virtue of regulation 7(2)(a) of *The Noise Insulation (Railways And Other Guided Transport Systems) Regulations 1996*. The Secretaries of State might form their own view of this point of law, but to my mind it seems that since the power of acquisition here would be confined by article 27 of the draft Order to interests in the subsoil at least 3 metres beneath the surface, the small outbuilding would not itself be rendered ineligible (if it is eligible in all other respects). In any event, Mrs Harris' objection relates to conditions at the house on her property, and the house is not the subject of any compulsory purchase order, draft or made, that was in evidence at the Inquiry.

3.11 **Human Rights**

- 3.11.1 Further to the matters reported in my paragraphs 3.3.13 to 3.3.16, Mrs Harris is concerned that her human rights were not met, particularly in respect of Article 6 of the European Convention of Human Rights. Mrs Harris made no representation to indicate that the timescale to which this Inquiry operated was other than in accordance with the statutory requirements. Mrs Harris' written submission (document Obj/213/9) was handed to the Programme Officer while Chiltern were making their closing submissions. Once those submissions were complete I sought to speak to Mrs Harris but was told by several parties then present that she had left the building. When all other business was complete on that day, I closed the inquiry. I am satisfied that Mrs Harris received a fair and public hearing within a reasonable time, and that no adjournment to allow her further time to consider her case was necessary.
- 3.11.2 Topbreed Limited and Primepark Limited contend that a lack of consultation, prior to the Order being published, has deprived the affected owners and residents of their right to full representation and that failure has led to a loss of their rights under the Human Rights Act 1998, as consultation prior to the Order Route Publication was not completed. Both companies were represented at the Inquiry and took an active part in it (section 6.33 of this report refers). They received a fair and public hearing within a reasonable time.

4 **THE CASE FOR CHILTERN RAILWAYS**

The material points were:

4.1 Regulatory and Contractual Framework

The National Rail Regulatory Network

- 4.1.1 The Railways Act 1993 ("the 1993 Act") provides for the delivery of most passenger rail services by train operating companies through railway franchise agreements. The services provided by Chiltern are designated by the Secretary of State for Transport pursuant to section 23 of the 1993 Act.
- 4.1.2 The 2004 White Paper *The Future of Rail* (CD/3.10) expresses support for improved performance on the railways including, where appropriate, the provision of infrastructure enhancements. Following the White Paper and the Railways Act 2005, responsibility for the strategic and financial planning of the railways passed to the Secretary of State while the Office of Rail Regulation became responsible for the safety and economic regulation of the railway industry, including Network Rail and the train operating companies.
- 4.1.3 Network Rail is the monopoly supplier of the national rail infrastructure, pursuant to a network licence granted by the Secretary of State in 1994. The licence obliges Network Rail to secure, among other things, the improvement, enhancement and development of the network.
- 4.1.4 Chiltern runs passenger trains over Network Rail infrastructure under the terms of a Track Access Agreement dated 5 February 2004 (CD/2.14). This has subsequently been amended by a series of Supplemental Track Access Agreements through which the Office of Rail Regulation directs Network Rail to grant Chiltern permission to use certain routes and to undertake certain works. Chiltern thus has full regulatory and commercial rights to invest in and undertake work on Network Rail infrastructure.
- 4.1.5 The Franchise Agreement (CD/2.2) between Chiltern and the Secretary of State allows Chiltern to bring forward rail infrastructure projects, including the Order Scheme. The principle of the Scheme therefore accords with the policy of the 1993 Act, as amended, to promote improvements to the performance of the railways and their development. The Scheme is the latest of a number of rail investment projects which Chiltern has contracted to provide in accordance with the regulatory framework within which the company operates.
- 4.1.6 The Order scheme is consistent with the obligation previously mentioned placed on Network Rail by its network licence, and Network Rail, with the agreement and approval of the Office of Rail Regulation, has agreed to fund the Scheme works through the Regulated Asset Base. The Scheme is therefore consistent with the national policy and regulatory framework.

The Chiltern Railways Franchise Agreement And The Requirement To Develop A New Rail Link To Oxford

- 4.1.7 The Chiltern Railways Franchise Agreement (CD/2.2) is unique in that it gives Chiltern a franchise term potentially longer than the usual franchise term of 7 to 10 years, in return for Chiltern taking the risk on investment projects. Among the key features of the Agreement are:

- a) Franchise Payments may be made between the Secretary of State and Chiltern, initially to Chiltern but latterly by Chiltern to the Secretary of State.
- b) Chiltern is required to provide a specific railway passenger service and, through an Output Plan in the Franchise Agreement, to provide certain improvements to the railway.
- c) The Agreement shall last for at least 10 years and, subject to Chiltern contracting to provide further investment projects, up to 20 years.
- d) An arrangement whereby Chiltern may propose projects for further consideration by the Department for Transport and, if such projects are accepted, the guaranteed minimum franchise term will be extended.

- 4.1.8 The Order Scheme essentially comprises a project identified in the franchise agreement pursuant to item 4.1.7 (d) above and referred to as the Oxford Line:

The Franchise Operator proposes to open a new route to Oxford, either between Princes Risborough and Oxford via Wheatley, with new stations at M40 Junction and South Oxford or via a new south to east curve at Bicester, with stations at Bicester Village (now known as Bicester Town) and Water Eaton Parkway. Once opened, the Franchise Operator proposes to operate Passenger Services between Oxford and London Marylebone. It is envisaged that these Passenger Services would be a mixture of new Passenger Services and an extension of existing Passenger Services. It is acknowledged that Project Evergreen Phase C (or broadly equivalent works) will be required before the Oxford line can be completed.

- 4.1.9 Project Evergreen Phase C is intended to increase capacity and reduce journey times between High Wycombe and South Ruislip.
- 4.1.10 On 1 August 2008, Chiltern submitted to the Secretary of State proposals for the "Evergreen 3" project, comprising the Oxford Line via Bicester and line speed and capacity enhancements for the London Marylebone-Birmingham line (Project Evergreen Phase C). On 7 November 2008 the Secretary of State wrote to Chiltern granting permission to develop these proposals further, and on 6 January 2010 Chiltern contracted to deliver Evergreen 3 outputs including the Order Scheme. The upgrading of the Chiltern main line is now in hand. Providing that the specified outputs were delivered, the franchise term was extended to its full duration, until 2021.
- 4.1.11 In summary, the franchise agreement requires Chiltern to make proposals for a new rail route to Oxford. The Order Scheme achieves that purpose. The Evergreen 3 proposals have been agreed by the Secretary of State, subject to the granting of the necessary Transport and Works Order. And Chiltern has agreements in place with the main contractor for the Scheme, thus giving certainty to project costs and delivery.

Funding And The Commercial Case

- 4.1.12 The Scheme would be split into three phases.

Phase	Key Deliverables
Phase 1	New Bicester Chord line. Track doubling Gavray Road junction to Langford Junction, and Islip Junction to Peartree Junction. New line Woodstock Road junction to Oxford station. Rebuild Bicester Town, Islip and Oxford stations. New station at Water Eaton Parkway. Resignalling throughout. Closing and replacing level crossings. Mitigation works.
Phase 2A	"W12+" gauge enhancement in Wolvercot Tunnel and elsewhere.
Phase 2B	Double track Langford Junction to Islip Junction and Peartree Junction to Woodstock Road junction. Second platform at Islip station. New MoD connection and widening of A41 bridge for 3 tracks. Mitigation works.

4.1.13 Phase 1 would be financed as a private commercial venture, with capital costs funded from farebox earnings. Phase 1 services would come into operation by May 2013. The Phase 1 works would not require any public subsidy, and would not add to the national debt:

- a) Chiltern is funding the outline design and development work, and takes the specification risk.
- b) Chiltern would pay the chosen contractor (BAM Nuttall) for defined project deliverables and would take the resultant cost and delivery risks.
- c) Chiltern would receive money to pay the contractor from Network Rail, when agreed milestones are reached at a pre-agreed sum. Chiltern would then pay Network Rail for the capital costs of the scheme, by means of a facility charge over the 30-year financing life of the project. This in turn would be funded by the passenger revenues earned, at a rate agreed with the Office of Rail Regulation. The Department for Transport in January 2010 assured Network Rail that, after 2021, the successors to Chiltern would continue to pay this charge until the end of the 30-year period. As Chiltern and its successors would take the full revenue risk of the Order scheme, Chiltern would have in effect a "mortgage" with Network Rail.
- d) Any freight operators or other non-competing users of the line, such as traffic associated with the East West Rail project, would pay track access charges to Network Rail as laid down by the Office of Rail Regulation. Chiltern would receive no financial benefit from such charges.

4.1.14 Phase 2A arises from the Department for Transport's report on a "Strategic Rail Freight Network". The SRFN includes the potential East West Rail route from Oxford via Bicester to Bletchley and Bedford among the rail freight routes most important to the national economy. Should that scheme proceed, it is possible that freight trains carrying international shipping containers would operate over the Bicester to Oxford line, and that would require gauge enhancement work in Wolvercot tunnel (known here as Phase 2A) and elsewhere. Studies for

the Department for Transport indicated that it would be more economical and less disruptive to carry out this work at the same time as the Order Scheme. The DfT has undertaken to make a direct financial contribution in respect of Phase 2A.

- 4.1.15 Phase 2B depends on the East West Rail project being authorised. Full Approval for that scheme, described later in this report, is not expected until 2014; and conditional funding approval is anticipated during 2013. There is a reasonable prospect of the Phase 2B works being funded as part of the East West Rail project.

- 4.1.16 As shown in the following table, Chiltern's revenues and committed DfT payments will be enough to pay for the Phase 1 and Phase 2A works:

Chiltern's Commercial Business Case	
	Total 2010-2021, £million
Farebox income	157.3
Network Rail facility charge	-116.5
Incremental maintenance and renewals costs	-26.3
Incremental train operating costs	-7.6
Station operations, marketing, staffing costs	-5.5
Third-party agreements	-18.1
DfT payment for Phase 2A works	18.0
Total cash flow	1.1

- 4.1.17 This business case was approved by the Board of DB Regio UK Ltd (Chiltern's parent company) on 18 December 2009 and was audited and agreed by the Department for Transport prior to the 6 January 2010 agreement. The Scheme is to be funded on a fully-commercial basis, with all financial, commercial and performance risk taken by Chiltern.

4.2 Transport

Objectives of the Scheme

- 4.2.1 The Scheme Objectives are:

- To increase rail capacity on the Oxford-London corridor, the need for which is described in paragraphs 4.2.3 to 4.2.7 of this report.
- To improve access to the rail network for Oxford and north Oxfordshire. The need for this arises from the location of Oxford station. Situated to the west of the city centre, it is remote from many of the city's residential and business areas. It suffers from congested local roads and a lack of car parking spaces. And there is a long-standing aspiration for a railway station to serve Kidlington.
- To provide a sustainable alternative to the car, particularly for commuting journeys into Oxford. The need for this is

demonstrated by the current severe traffic congestion in Oxford and the surrounding areas, particularly at peak periods. Commuter journey times into Oxford are among the longest in the country, whilst longer-distance journeys are affected by delays on the motorway and trunk road network.

- d) To help delivery of public policies for economic and spatial development, as set out in national planning policy – specifically Planning Policy Statement 1 *Delivering Sustainable Development*, and Planning Policy Guidance 13 *Transport*: there is a need to combine spatial planning with an appreciation of transport networks to promote development around public transport routes and to provide an attractive and sustainable alternative to using a car. Strategic public transport links are needed to support planned growth advocated through the South East Plan.
- e) To facilitate the East West Rail link. The Scheme would support the future success of the Oxford/Cambridge “Knowledge Arc” and the growth of Milton Keynes.
- f) To extend the use of an environmentally friendly and safe form of transport, with particular reference to the relatively high carbon dioxide emissions from car trips compared with rail, and the relative safety of rail travel.
- g) To facilitate the redevelopment of Oxford station, the need for which is described at paragraph 4.2.6 of this report.

4.2.2 In developing the scheme, there were further relevant considerations. These included the needs to:

- Minimise capital and operating costs;
- Cause the least disruption during construction and operation; and,
- Make sufficient operating profit to enable funding as a private sector project.

Pressure

4.2.3 In recent years, Britain’s railways have seen unprecedented traffic growth. Passenger numbers have increased by 67% since 1995. This is due to economic growth, highway congestion, housing and business development near railway station, and improved train services. Rail traffic is rising again following the recession and the Department for Transport, Network Rail and the National Audit Office have all forecast substantial further growth in future.

4.2.4 Rail traffic from Oxford to London has increased by 31.4% between 2006/7 and 2009/10 and this growth is continuing. Passenger numbers on First Great Western’s Thames Valley services have been growing at between 3 and 4 percentage points above the average for London and the South East, which itself grew by about 3.5% in the year to date. Further growth is forecast in future, with 2007 ridership expected to increase by 2026 by almost 50% for full-fare tickets (business travel), 40% for reduced-fare tickets (leisure travel) and 20% for season tickets (commuting). This has led to significant overcrowding on peak-hour

trains to London, and at Oxford station.

- 4.2.5 Almost all Oxford – London trains suffer from overcrowding at peak periods. Of 16 Oxford arrivals at Paddington in the morning peak (07:00 to 10:00), 9 have load factors (the ratio of passengers to seats, expressed as a percentage) in excess of 100%. In the “high peak” (08:00 to 09:00), 5 trains have load factors of between 132% and 188%. This is despite First Great Western lengthening trains where possible, and they have proposed to the DfT that there is thus a strong case for further investment in the Thames Valley area, including from Oxford. The 2007 Rail White Paper said that average peak load factors should be moved down towards 70%, and that capacity increases should be aimed at services with major overcrowding.
- 4.2.6 Oxford station saw 19.6% growth in passenger footfall between 2006/7 and 2009/10. As noted in the Oxford Local Plan (CD/4.3), it is now routinely crowded for much of the day. It is inadequate for its number of passengers, for its number of trains and as a gateway to one of the UK’s finest cultural and academic centres. The Scheme would help manage crowding at Oxford station by providing an alternative railhead at Water Eaton Parkway, which would be more convenient for many areas in north Oxford and north and west Oxfordshire.
- 4.2.7 The lines from Oxford to Didcot and onwards via Reading to London operate at or near full capacity, as does Paddington station, and there is little scope for additional trains. Network Rail’s Route Utilisation Studies recommend that the Scheme should proceed.
- 4.2.8 Rail traffic from Bicester to Oxford has also grown substantially, despite the relatively slow and infrequent train service.
- 4.2.9 Around 5000 extra homes are planned to be built in Bicester by 2026, together with new employment areas. Substantial housing and business growth is also expected in Oxford. The A34 and M40 roads already operate at or near capacity, and will be at 130% of capacity by 2026. Demand for rail travel is growing rapidly, particularly to and from Oxford as a result of housing growth and road congestion.
- 4.2.10 Despite recent growth, rail’s market share from Oxford is lower than for comparable cities, as shown in the table following this paragraph. Oxford station is remote from many residential and business areas. The proposed station at Water Eaton Parkway would provide an additional railhead outside the City with convenient access for trips arising from north Oxford and north and west Oxfordshire.

/over

Comparative Rail Ridership			
	Oxford	Cambridge	Milton Keynes
Population	153,900	122,800	232,200
Distance to London, miles	64	58	50
Trains per hour to London, weekday off-peak	4	6	7
Rail passengers to/from London, per year	1,928,434	3,277,919	3,626,000
London rail journeys per head per year	12.5	26.7	15.6

Wider Societal Benefits

- 4.2.11 With regard to energy and emissions, investment in the rail network is widely seen as an effective means of delivering a more sustainable transport system. Research by the Rail Safety and Standards Board shows that a train emits substantially less carbon dioxide per passenger kilometre than does a car or single-deck bus.
- 4.2.12 Incremental expansion of the existing rail network (as with the Scheme) is far less disruptive to the community and the environment than is the construction of new roads, or the widening of existing roads.
- 4.2.13 The Scheme would also bring safety benefits. The British rail network is one of the safest forms of transport in the world. It is thus beneficial to encourage travel by rail rather than by road. Level crossings are now considered to be the greatest source of safety risk on the rail network, and so, with the removal of all but one level crossing on the Bicester to Oxford route, the Scheme would provide safety benefits beyond those resulting from modal transfer.
- 4.2.14 There is a clear relationship between economic growth and rail traffic growth. In recent years the rate of rail growth has outstripped that of gross domestic product, indicating that the overall role of rail in the economy is increasing. Improved rail services give access to wider employment, retail and leisure markets, and to new business opportunities. New and upgraded rail lines have been used extensively to encourage regeneration. And economic growth in turn generates extra commuting and business travel, requiring extra rail capacity. The trend towards service-industry employment in urban centres which can be most effectively accessed by public transport compounds this effect.

Alternatives Considered

- 4.2.15 All major projects involve the process of considering alternatives and refining route and engineering options to meet identified scheme objectives. In this case, the objectives are as set out in paragraph 1.3 of this report.
- 4.2.16 **Three non-rail based options** were considered but dismissed:
- a) Park and ride using an existing railhead: many passengers

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- from north and west Oxfordshire already drive to stations at Banbury, Bicester North and Haddenham & Thame Parkway. All three locations were considered to be unsustainable for journeys to and from Oxford as they would result in longer car journeys to the stations alongside capacity problems with the existing car parks.
- b) Conventional bus to an existing railhead would be relatively slow and unreliable compared to a rail link. Moreover, many passengers would be faced with a double interchange penalty (car or local bus to railhead bus to train) which would make the journey uncompetitive in terms of time and convenience.
 - c) Guided bus along the Oxford-Bicester railway route would have enabled faster and more reliable bus journeys than would be possible on the public highway. But the busway technology has proved problematic elsewhere; the capital costs would be considerable and rail access to MoD Bicester would no longer be possible.
- 4.2.17 None of these non-rail options would have helped the East West Rail project.
- 4.2.18 **Three rail-based options** (shown in figure 14 of document CRCL/P/2/A) were also considered. One, the Chinnor Branch, was dropped at an early stage due to a lack of stakeholder support and low forecast patronage.
- 4.2.19 There remained the Northern Corridor and the Southern Corridor. These were further evaluated in a report by Chiltern to the former Strategic Rail Authority in 2003 (document CD/2.3). The report found that the Northern Corridor was better than the Southern Corridor in the following ways:
- a) The Northern Corridor would largely use an existing railway whereas the Southern Corridor had to a significant extent been built over. The Northern Corridor would involve less construction and less disturbance.
 - b) The proposed Water Eaton Parkway station would have excellent links to Oxford city centre and (for example) other destinations such as the John Radcliffe hospital, and Kidlington. Car users from north and east Oxford and from north and west Oxfordshire could reach the railway without the present need to cross the city centre en route to Oxford station.
 - c) Extra revenue would result from improving the Bicester Town to Oxford commuter service with commensurate socio-economic benefits.
 - d) The Northern Corridor would support development of the East West Route, whereas the Southern Corridor would not.
 - e) Trains on the Southern Corridor would need to use the currently congested main line south of Oxford, whereas the Northern Corridor would use currently abandoned tracks to the north of Oxford, and those tracks could be reinstated to create extra capacity.
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- f) The Northern Corridor offered a higher benefit:cost ratio than the Southern Corridor.
- 4.2.20 The Northern Corridor was therefore preferred.
- 4.2.21 Within the Northern Corridor, various design options were considered.
- a) Options other than the Scheme proposal were evaluated for the connection with the Chiltern main line at Bicester, and for the connection with the main line at Oxford. These were discarded due to capital costs, additional disruption to the community and, for the former, the inability to directly serve Bicester.
- b) Alternative station sites were considered at Bicester Interchange, where the two rail lines cross; at Bicester Ring Road, west of the A41; and at Bicester Parkway, near M40 junction 9. All were discarded as being less convenient for passengers than the existing Bicester Town station.
- c) Reopening the intermediate halts that were closed in 1926 was discarded, due to their minimal revenue potential.
- d) A Parkway station at Peartree instead of Water Eaton was considered but not pursued because it would be served by fewer bus routes, because it would be further from Kidlington, and because it would have a greater impact on the local community and the environment.
- 4.2.22 Water Eaton Parkway offers significant potential as a multi-modal interchange with excellent bus, cycle and road links. It is close to Kidlington (which is not served by rail and for which the local authorities have long campaigned for a station). The Water Eaton Parkway site is in the Green Belt. However, an assessment of the site against the non-Green Belt alternative at Peartree showed it to be the more sustainable station location.

Proposed Train Services

- 4.2.23 Chiltern proposes to operate two passenger trains per hour in both directions between London Marylebone and Oxford, calling at High Wycombe, Bicester Town and Water Eaton Parkway. Selected trains would also call at Islip. This would meet the service requirement set out by the Secretary of State and, in the case of Islip, would exceed it. This service would operate throughout the day Monday to Sunday, except that services would be less frequent in the late evening and on Sunday mornings.
- 4.2.24 Should East West Rail proceed, there would be an additional two passenger trains each way every hour between Oxford and Milton Keynes. The possibility of an additional cross-country train every hour has also been examined in the Scheme's environmental statement.
- 4.2.25 Phases 1 and 2A of the Scheme would not result in more freight trains than currently use the railway – 2 to 5 each way, per day. The Phase 2A works would provide clearances for 9'6" (approximately 2.9 metres) high shipping containers on conventional wagons, in line with work elsewhere on the rail network. Phase 2B, enabling East West Rail, may result in

more freight trains, although the business case for that project does not rely on freight growth. Capacity would be provided for one freight train “path” each way each hour throughout each 24-hour day, but freight traffic varies with market needs and perhaps only half of the planned “paths” would be used on a given day. Trains up to 645 metres long already use the line on occasion, and the length of freight trains varies according to market needs. The maximum axle load for freight trains would continue, as now, to be 25.5 tonnes; a load only fully achieved by trains carrying bulk material such as aggregates, whereas container trains are much lighter with axle loads of around 17 to 18 tonnes.

- 4.2.26 It is unlikely that new freight services would run in either Phase 1 or Phase 2A, as the route would neither give access to new freight terminals nor improve access to existing ones. In Phase 2A the line could not be used for short or deep-sea container trains from the Solent ports, or as a new route to the West Coast Main Line, because such traffic would depend on reinstating the railway between Claydon LNE Junction (east of Bicester) and Bletchley. That would only happen if the East West Rail Project went ahead, that is, in Phase 2B.

- 4.2.27 The Scheme would provide significant journey time savings:

Sample station to station journey times			
From	To	Service time (minutes)	
		Current	With the Scheme
Oxford	London terminus	(Paddington) 54-92	(Marylebone) 66
	High Wycombe	No service	38
Water Eaton Parkway	London Marylebone	No service	58
	High Wycombe	No service	30
Islip	Oxford	15	8
	London terminus	(Paddington) 76-85 via Oxford	(Marylebone) 56
Bicester Town	Oxford	26	14
	Water Eaton Parkway	No service	8

- 4.2.28 The locations of Marylebone and Water Eaton Parkway stations also give significant time savings for onward journeys in London (Marylebone is nearer the West End than Paddington is, and has easier interchange with the Underground) and in north Oxfordshire (due to the proposed Parkway station).

Transport Integration

- 4.2.29 The Scheme has been designed to maximise opportunities for interchange between rail and other non-car travel modes – bus, cycle and walking. Access to the railway by private car is also important, particularly from rural areas with no suitable bus links. Enough station car parking would be provided so that rail users do not need to park on street or in other non-station car parks. The planned parking capacity would also provide for the forecast demand arising from East West Rail.

Substantial development is planned at Bicester and Chiltern will work closely with the local authorities, the promoters of the development and with bus operators to ensure that both Bicester railway stations are fully integrated into the developing town.

- 4.2.30 Water Eaton Parkway would be developed as a multi-modal transport interchange. The site is already served by frequent bus services along the Banbury Road and by express buses to the park and ride site next to the proposed Parkway station, and new facilities would be provided on Banbury Road and in the site to ease interchange between bus and rail. A new cycleway would connect the station to the cycleway on Banbury Road, and there would be parking for 100 cycles. Additional car parking would be built so that rail parking demand would not impinge on parking provided for bus users.
- 4.2.31 Water Eaton Parkway would be attractive for travel from locations in north and east Oxford, and north and west Oxfordshire because the travel distances to the new railhead would be less than to Oxford Station or Bicester North Station; journey times to London would be reduced; there would be less need to use congested urban roads; and the new station would be within walking and cycling distance of Kidlington and Wolvercote.
- 4.2.32 Chiltern and Oxfordshire County Council have signed an Implementation Agreement and the County Council has withdrawn its objections to the Scheme, subject to planning conditions. Network Rail has consented to Chiltern entering into the agreement and the exercise by Network Rail of any powers and rights under the Order is subject to the terms of the agreement, as provided by Article 44(3) of the draft Order. The Agreement is described by document CRCL/INQ/66 and includes, among other things, arrangements for:
- a) The adoption of highways and the maintenance of bridges etc.
 - b) Highway design and delivery.
 - c) Provision and management of parking at Bicester Town station.
 - d) Provision and management of parking at Water Eaton Parkway station.
 - e) The improvement and redevelopment of Oxford station.

4.3 **East West Rail**

Description

- 4.3.1 The East West Rail Consortium was formed in 1995 to promote and secure a strategic railway connecting East Anglia with Central, Southern and Western England. The Consortium brings together local authorities, Network Rail and stakeholders from across the South East and the East of England.
- 4.3.2 The East West Rail link is envisaged as a strategic rail route that would link Ipswich, Norwich and Cambridge with Bedford, Milton Keynes, Bicester and Oxford. There would be a spur to Aylesbury. The link is being planned in three phases: the section between Ipswich and Cambridge (which is already in place), the section between Cambridge and Bedford, and the western section between Bedford and Oxford. The

first project objective is to provide the western section by 2017. The western section has been evaluated as an entirely separate entity to the other two parts of East West Rail and its efficacy in transport and economic terms does not depend on the central section. The western section would connect important growth areas and it would support balanced growth of houses and jobs. Above all it would provide a real and sustainable transport alternative to the use of the trunk road network in the area where there is no high-capacity road network linking the key centres of Milton Keynes, Bicester, Aylesbury and Oxford.

- 4.3.3 The section of East West Rail from Bicester to Bletchley and Milton Keynes is supported by the Oxford Local Transport Plan 2006-2011(CD/4.6), the Oxfordshire LTP3 Draft for Consultation – October 2010, the Cherwell Local Development Framework Draft Core Strategy (CD/4.12) and the Oxford City Council Core Strategy Proposed Submission (CD/4.9). The Milton Keynes and South Midlands Sub-Regional Strategy (CD/4.2) refers to the need for further proposals for improving public transport there, the expectation that a study of future transport and growth would be carried out, and the need for any decision on the East West Rail (Western Section) to be informed by the outcome of that study.
- 4.3.4 Work on the central section of the link is now under way to establish definitive routes between Bedford, Sandy and Cambridge, with additional options for introducing a link and interchange with the East Coast Main Line.
- 4.3.5 The Order Scheme and the western section of East West Rail have been designed to be compatible with each other. The Order Scheme makes specific provision for all the key physical railway works needed for East West Rail services between Oxford and Bicester.
- 4.3.6 When the Inquiry opened, development of the western section proposals had reached Stage 4 as described in Network Rail's Guide to Railway Investment Projects ("GRIP"). The outline design and capital cost estimate, including drawings and specifications of the proposed railway infrastructure, and a draft Outline Business Case report, were completed in June 2010. A strong business case exists for the western section with an exceptional benefit to cost ratio of 6.3:1.
- 4.3.7 The 2017 target date for the start of train services on the western section is based on the premise that East West Rail will be included in the Department for Transport's High Level Output Specification for the period 2014 to 2019. The Consortium met Theresa Villiers, the Minister of Transport, on 4 November 2010 after which the Department for Transport gave written confirmation that East West Rail will be considered as a candidate scheme for the HLOS for the next Control Period (2014 to 2019), and that the Minister has committed the Department's civil servants to continue to work closely with the Consortium on the development of the project, while noting that the overall amount of public funds available had yet to be determined but was unlikely to extend to cover all candidate schemes (document CRCL/INQ/30, Appendix A).
- 4.3.8 The Consortium is now progressing to the next stages of the project,

including engineering design work to GRIP 5 level, application to the Infrastructure Planning Commission or its successor for a Development Consent Order that will provide statutory powers to build the new railway infrastructure, consultation, land referencing and environmental studies necessary for the DCO application, and finalising the funding.

- 4.3.9 The Consortium is encouraged by DfT's contribution to the Order Scheme in respect of Phase 2A works not required by the Order Scheme that ensures the "future proofing" of the East West route for national rail network strategic objectives. Funding through the Regulated Asset Base will be explored. This is a similar method to that used for the Order Scheme. The Consortium forecasts a positive revenue return which, together with track access charges, can be used to repay the investment. Funding may also be secured from developer contributions. East West Rail had been identified as a regional investment priority in support of the South East Plan; the western section is promoted as a key piece of enabling infrastructure in three geographically relevant Local Enterprise Partnerships – Oxfordshire, Thames Valley Buckinghamshire and South East Midlands. In total these elements are likely to provide for the necessary funding for provision of the western section of East West Rail by 2017.
- 4.3.10 The preferred method of programme delivery will be chosen by the Consortium with the DfT and Network Rail, and the Consortium will begin planning for the likely requirement for a Transport and Works Act Order application.

Inclusion In The Order Of Land Required Only If East West Rail Proceeds

- 4.3.11 Document CRCL/INQ/64 identifies land parcels required solely in connection with Phase 2B works. They are relatively few in number and would be needed in connection with works to the A41 bridge and construction of a third track at Bicester (both in connection with reconfiguration of the rail access to the MoD depot), earthworks associated with the reinstatement of a second track between Bicester and Islip, and the provision of disabled parking at Islip station.
- 4.3.12 There are several reasons why the Order Scheme should be considered as a single entity for the purposes of the tests in Circular 06/2004:
- a) The costs of the EWR elements of the Order scheme would be around £74 million out of a total of about £185 million. The substantial additional capacity and connectivity provided by East West Rail can only be delivered for this small additional cost if the principal engineering works, including the lowering of the Wolvercot tunnel and the construction of the stations are delivered as a single cost-effective Phase 1 and 2A contract with the railway closed under "blockade".
 - b) The high Benefit:Cost ratios reported for East West Rail are, in part, a result of the prior investment proposed to be made by Chiltern and the DfT in Phases 1 and 2A of the Order Scheme. This substantial investment helps to underpin the business case for the East West Rail western section and increases the

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- likelihood that it will secure public funding, instead of other, competing schemes. This “future proofing” should be given considerable weight in the determination of the public interest.
- c) Apart from the cost savings that arise through the delivery of most of the engineering works needed as a single contract, considerable environmental and accessibility benefits would arise because the works in Phases 1 and 2A would be delivered swiftly under “blockade” conditions, avoiding the prospect of two distinct periods of disruption during construction. Phase 2B would be deliverable with only short possessions when works need to be tied in to the previously-completed Phase 1 and 2A works.
- d) The DfT decision to fund the “gauge enhancement” works at Wolvercot tunnel and elsewhere is indicative of the strength of the underlying case for East West Rail. This reflects the inclusion of the Oxford-Bletchley-Bedford EWR route in the Department’s “Strategic Rail Freight Network” report (2009), included in Appendix 6 of document CRCL/P/2/B.
- 4.3.13 There are parts of the route, for example from the A41 overbridge at Bicester to Islip station, where there would need to be separate Phase 2B sets of works, but overall there are strong practical engineering and environmental reasons for approving the Order Scheme as a whole.
- 4.3.14 In Phase 1, the section between Bicester (Highfield Junction) and Islip (Mill Stream Junction) would remain single-tracked and it is currently intended that the track over this section would follow its present alignment, which changes from one side of the formation to the other near the M40 and again near Yew Tree Farm footpath crossing. But it may be that detailed investigation finds that the track and formation in this part of the Scheme are not in such good condition as is currently believed. In that case, other works may be necessary on that part of the line so as to build all of the re-laid track on one side of the formation to further ease the subsequent laying of the second track in Phase 2B; and many of the earthworks repairs for which land acquisition would be needed in this area of the Scheme would then be required for the implementation and operation of Phase 1.
- 4.4 **Demand Forecasts and Economic Appraisal**
- Demand Forecasting***
- 4.4.1 The Scheme would alter railway passenger services in three broad ways:
- a) By providing a new service for the existing Oxford to London market, via Bicester;
- b) By opening up the North Oxfordshire to London market, with a new station at Water Eaton and a change in service levels at Bicester Town; and,
- c) The provision of new direct rail journey opportunities, such as between Oxford and High Wycombe.
- 4.4.2 Demand and revenue forecasts are needed to inform:
- a) The commercial case for the Scheme;
-

- b) The transport/economic case for the scheme;
- c) Assessment of the road traffic effects of the scheme; and,
- d) Parking demand at the stations.

4.4.3 Each of the three main types of change that the Scheme would make to passenger services is of a different character, such that three models must be used to produce a reliable assessment. They are:

- a) MOIRA, the industry standard software for forecasting changes in demand and revenue driven by incremental timetable changes in existing markets. MOIRA is the appropriate tool to use for forecasting demand and revenue changes for the Oxford to London market. It is a calculation device to assist in implementing the generalised journey time approach recommended in TAG Unit 3.15.4 (CRCL/INQ/23).
- b) Catchment analysis, based on the estimation of catchment areas for each station for trips between London and stations which are either new or would experience a big change in services to and from London: these are Water Eaton Parkway and Bicester Town. The analysis involves covering the study area with tessellating 500 metre sided hexagons as a base for the identification of catchment areas. The hexagons are known as "hexcells", from which the method takes its name. The method was developed by transport consultants Steer Davies Gleave and has been widely applied over the last ten years. Document CRCL/INQ/22 describes an assessment of the reliability of this method. In a study of the accuracy of forecasts for 23 new stations, the view was taken that a reasonable level of accuracy for the forecasts was plus or minus 20%, and it was found that about 40% of the forecasts were within this benchmark. Four of the stations were producer (origin) stations. This table shows the findings:

Catchment Modelling: Comparison Of Forecasts And Outturns				
Station	Opening date	Forecast Demand ('08/'09)	Outturn Demand ('08/'09)	% Difference
Chandlers Ford	2004	223,115	236,102	6% low
Mitcham Eastfield	2008	210,778	199,132	6% high
Newbridge	2008	122,462	115,676	6% high
Larkhall - Chatelherault	2005	602,394	474,902	21% high

- c) Intermediate flows are estimated on the basis of Census journey-to-work data expanded to match the observed base annual demand, where relevant.

4.4.4 Document CD/2.30 presents details of the methods and of the findings. Figure 3.3 shows the extents of catchment areas of the Scheme's stations at Water Eaton, Islip and Bicester Town: the Bicester Town catchment, for example, lies largely to the south and east of the town

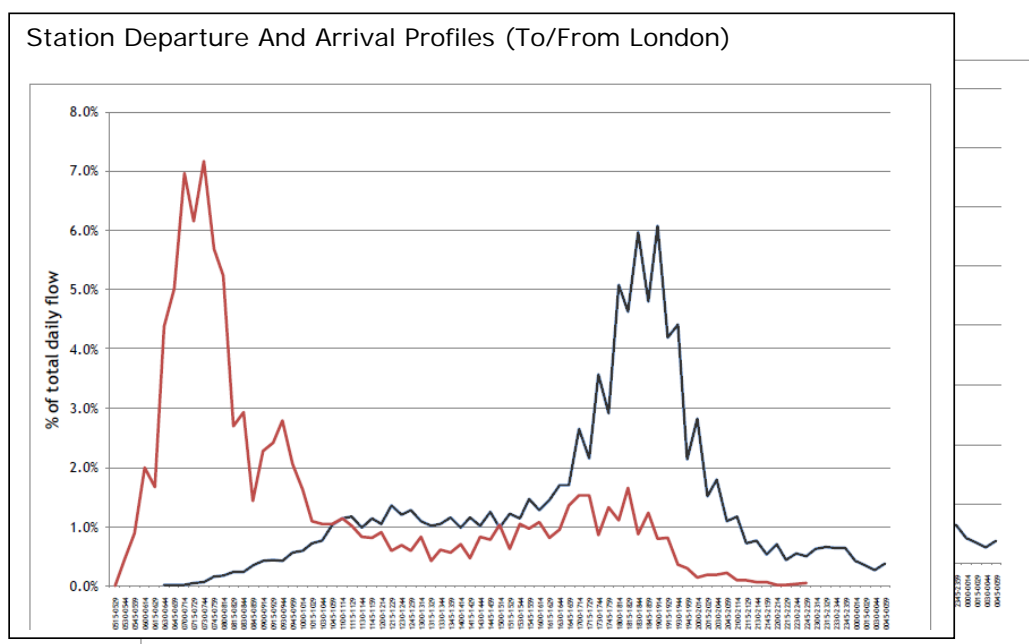
and to the north and east of Islip while that for Oxford station extends no further north than Oxford North Junction, to the south of Wolvercote. Also among the findings are these estimates of newly generated trips for the forecast year of 2016:

67,000 journeys between Oxford and London;

134,000 journeys between Bicester Town or Water Eaton Parkway and London; and,

298,000 journeys on intermediate flows, particularly Bicester and High Wycombe to Oxford.

- 4.4.5 The station arrival times of travellers to and from Marylebone can be reliably estimated within quarter-hour bands from "gateline" data at that station, and station departure and arrival profiles as shown in the following diagram have been generated for stations on the Scheme. The peak period for departures from the station to London is between 0700 and 0800, when about 6% or 7% of the daily total would depart in each 15-minute period (and the subsequent hour would see a range from about 5% down to about 1.5% of the daily total leaving in each 15-minute period). Arrivals from London peak in the evening, with 6% of the daily total arriving during the quarter-hour starting at 1830 and slightly more during the quarter-hour starting at 1900, and proportionately much fewer during the preceding and subsequent hours.



- 4.4.6 These forecasts are available at the hexcell (in the case of demand to London) or ward (intermediate demand) level for the Do-Minimum and Do-Something cases. Changes in flows are mapped to an appropriate zoning system and applied as an overlay to base case traffic levels. A combination of ticket sales and passenger count data has been used to

reduce these annual forecasts to peak hour forecasts for this purpose. This approach gives a reasonable forecast of the highway traffic changes that would be associated with the Scheme, and a sound basis for car parking estimation.

- 4.4.7 The forecast car park requirements are based on an estimate of the number of car users driving to the station. This has been derived from the forecast highway impact. In addition, "ins" and "outs" profiles (surveyed at Bicester North station) have been used to calculate car park accumulations for average weekdays and for average Saturdays. Document CD/2.30 provides detail. The finding is that parking demand on Saturdays would be less than on weekdays. The car park requirement is estimated as shown in the following table:

Future Year Weekday Car Park Requirements			
	London	Other	Total
2016 Bicester Town	81	173	254
2016 Water Eaton Parkway	653	35	688
2026 Bicester Town	105	222	327
2026 Water Eaton Parkway	849	44	893

- 4.4.8 The Order Scheme is forecast to reduce car parking demand at Oxford station and would therefore improve the parking provision there.
- 4.4.9 If East West Rail were implemented, then additional car parking requirements in 2026 would be 145 at Bicester Town, and 214 at Water Eaton Parkway.
- 4.4.10 It is normal practice when designing car parks to provide some spare capacity to allow for forecasting uncertainty and day-to-day variation in demand.

Train Frequencies

- 4.4.11 The following table shows an indicative train operating timetable on the Oxford to Bicester line, with the maximum service frequencies that are likely after Phase 2 of the Scheme have been completed.

/over

Indicative Train Movements, Oxford/Bicester						
Start time	End time	Phase 2			Current	
		Chiltern passenger	Other passenger	Freight	Passenger	Freight
0	1	1	6	1	1	
1	2			1		
2	3			1		
3	4			1		
4	5			1		
5	6		3	1	1	1
6	7	4	6	1	1	
7	8	4	6	2	1	1
8	9	4	6	1	2	
9	10	4	6	2	1	1
10	11	4	6	1	1	
11	12	4	6	1	2	
12	13	4	6	2		1
13	14	4	6	1	1	
14	15	4	6	1	1	
15	16	4	6	2	2	1
16	17	4	6	1	1	
17	18	4	6	1	2	
18	19	4	6	2	1	1
19	20	4	6	1	1	
20	21	4	6	1	1	
21	22	3	6	1	2	
22	23	2	6	1		
23	0	2	6	1	1	

Economic Appraisal

- 4.4.12 The Scheme does not depend on public funding and so does not need to meet the Department for Transport's value for money test.
- 4.4.13 The scheme helps to bring forward transport, economic and environmental benefits, including:
- Enhancing the environmental capacity of Oxford, by improving connectivity (especially for those without access to a car), enhancing sustainable capacity and addressing traffic congestion (through mode shift of journeys to Oxford and switching car trips currently made to Oxford station to more sustainable station locations).

-
- Extending the benefits of the mainline Evergreen 3 improvements to a wider catchment.
 - Providing competitive choice for Oxford rail passengers to/from London.
 - Offering station choice at Bicester and therefore encouraging non-car access to a local station.
 - Facilitating future transport investment, notably East West Rail.
 - Encouraging strategic planned growth such as at North Bicester.
 - Reducing traffic congestion and carbon emissions through reduced car use.
 - Improving road safety.
 - Improving economic productivity through agglomeration and labour market efficiency improvements.

4.4.14 An economic assessment has been undertaken in accordance with current DfT Rail guidance in WebTAG and using the following key assumptions:

- A 60 year appraisal period from 2013 to 2072.
- Standard discount rates of 3.5% for the first 30 years and 3.0% thereafter.
- Appraisal base year of 2002, to which all costs and benefits have been discounted. If the instruction to start work is placed by Chiltern after 1 June 2011 then the construction costs, which is otherwise fixed, would be uplifted by the BCIS General Building Cost Index.
- Costs and benefits capped at 2030 levels.
- Use of standard values of time over the appraisal period.

4.4.15 The result of this economic assessment is summarised in the following Transport Economic Efficiency table:

/over

	£million, 2002 prices
PV Benefits	
User benefits	222.3
Non-User Benefits	
<i>Congestion</i>	116.3
<i>Accident</i>	9.2
<i>Local Air Quality</i>	0.6
<i>Noise</i>	0.7
<i>Greenhouse Gases</i>	0.5
<i>Total</i>	127.2
Revenue	88.5
Operating Costs	-44.1
Total PV Benefits	393.9
PV Costs	
Capital cost	-81.6
Indirect tax	-22.8
Total PV Costs	-104.4
Net Present Value	289.5
Benefit:Cost Ratio	3.8:1

4.4.16 In this table, the user benefits accrue from a faster and more frequent service. Reduced highway use reduces congestion, accidents, noise, greenhouse gas emissions and fuel tax revenue to the Government; and improves local air quality. There would be additional revenue to the rail operator, offset by additional operating costs.

4.4.17 Sensitivity analysis has been undertaken which suggests the Benefit:Cost Ratio shown in the table is robust.

Wider Economic Benefits

4.4.18 Over recent years, and particularly during and after the Eddington study into transport and economic growth, there has been an increasing interest in understanding how transport interacts with productivity and economic growth. Transport can in some cases produce important wider economic benefits over and above those accounted for in the standard approach to economic appraisal. The importance and validity of wider economic benefits is recognised by the DfT which has issued draft consultation guidance on the subject in WebTAG unit 3.5.14, which provides a rationale for estimating the wider economic benefits of transport investments. Chiltern's assessment method is set out in Appendix 3 of document CRCL/P/5/B. It relies on analysis of agglomeration benefits, improved market competition and labour market impacts.

4.4.19 Table 1 of CRCL/P/5/B Appendix 3 sets out some benchmark cases of wider economic benefits calculated for a variety of other schemes. The table draws on evidence developed in the business cases for other studies using the WEB methodology to estimate the total additionality of

wider economic benefits as a percentage of total benefits. Of the rail investments in the case studies the total additionality varies from 16% of total user benefits for the Melbourne East West Package to 56% for Crossrail. These example schemes all took place in major city areas which do not provide an exact comparison with the Evergreen project, which is interurban.

- 4.4.20 Nonetheless, to calculate the potential wider economic benefits ("WEB") additionality of the Scheme it seems sensible to take a conservative estimate from this range to apply to the economic benefits estimated in this study. Based on the benchmarking evidence, the total additionality uplift for the Scheme is estimated at 20% of total user benefits.
- 4.4.21 Although higher than the lowest rail effect for the Melbourne East West Rail package, this is a reasonable and conservative estimate of the potential benefits, given that the project is likely to show much more similarity to UK projects for which the estimated WEB uplifts are generally much higher. If wider economic benefits were to be included as part of the economic appraisal, they would have a net present value of around £44 million. This would raise the Net Present Value of the Scheme to £334 million, increasing the benefit:cost ratio from 3.8:1 to 4.2:1.

4.5 Engineering

Scheme Development

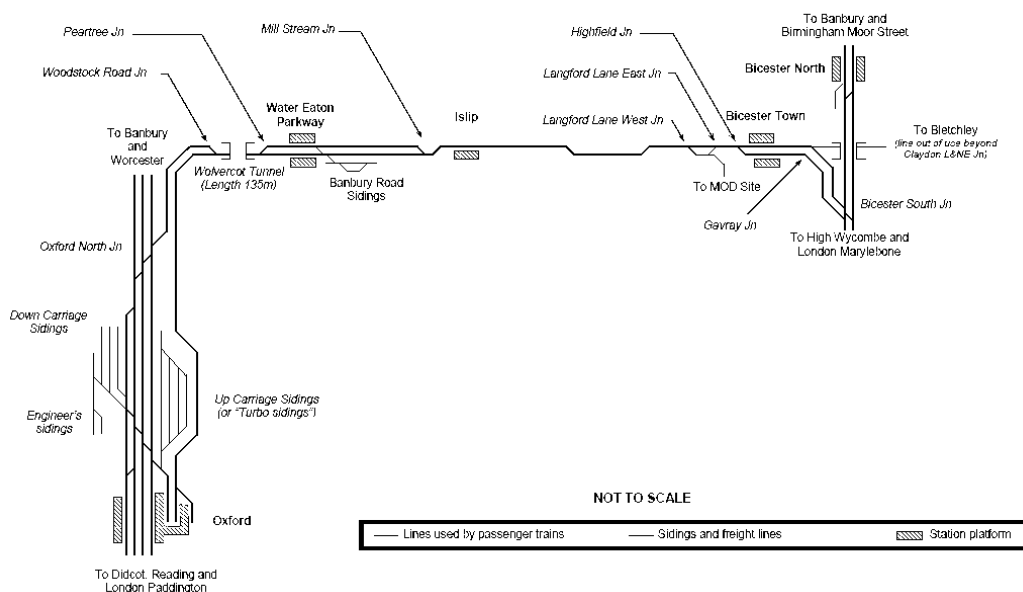
- 4.5.1 The route selection process is described in the part of this report starting at paragraph 4.2.15.
- 4.5.2 A process of option development and selection was implemented for the more significant features of the Scheme, such as bridges, level crossings and stations. For each of these features, all relevant factors were considered and advice taken from relevant experts. For some aspects of the Scheme, the design was further developed in the light of comments received during public consultation. Some modification of the Order Scheme is now proposed by Chiltern as part of that response. The Scheme as presented at the Inquiry is the most appropriate solution for each of the engineering challenges encountered on the route.

Description of the Scheme

- 4.5.3 In summary, the Scheme includes:
- Constructing approximately 1 km of new railway in Bicester.
 - Reconstruction of the existing Bletchley to Oxford railway between Bicester and Oxford North Junction, including:
 - Closing and removing all but one of the existing level crossings;
 - Building new bridges, roads and other mitigation measures as alternatives to the closed level crossings;
 - Rebuilding Bicester Town and Islip stations;
 - Building a new station at Water Eaton;
 - Works to Wolvercot tunnel and certain other structures to facilitate future freight operations and electrification;

- Removing most of the existing track;
 - Refurbishing and renewing the railway formation;
 - Installing new track.
 - Reinstating approximately 1.6 km of former railway in North Oxford.
 - Widening the railway bridge over Rewley Abbey Stream in Oxford.
 - Building two new platforms at Oxford station.
- 4.5.4 The terms “Up” and “Down” are sometimes used when referring to individual tracks of the railway. “Up” means the direction towards London, and “Down” the opposite. Near Oxford, for the reinstated line proposed by this scheme the “Up” direction is north while for the existing Didcot to Banbury line (in the same corridor) “Up” is south.
- 4.5.5 The proposed phasing of the work has been listed in paragraph 4.1.12 of this report. It is intended to undertake Phases 1 and 2A at the same time, with Phase 2B following later. The works have been designed to minimise the disruption to the operating railway that would be caused by the implementation of Phase 2B. Figures 1.1, 1.2 and 1.3 (on pages 49, 50 and 51 of document CRCL/P/6/B2) diagrammatically show the track layout as it is now, as proposed in Phases 1 and 2A and as proposed with Phase 2B. The following paragraphs 4.5.6 to 4.5.36 describe the Phase 1 and 2A works (illustrated by the following diagram), and paragraphs 4.5.37 to 4.5.39 describe the Phase 2B works.

Bicester – Oxford line : Track layout Phases 1 and 2A



- 4.5.6 **The new railway in Bicester** would commence at a new junction on the existing London Marylebone to Birmingham Moor Street line approximately 70 metres north west of the bridge carrying the railway over the A4421 Charbridge Lane. The new railway (Work No. 1) would have two tracks. Known as the Bicester Chord, it would connect the

existing main line, on its elevated track, to the existing Bletchley-Oxford railway, at ground level. The first 550 metres of this new railway would be on a new terrace some 10.4 metres wide on the side of the existing embankment, which would be widened accordingly. The initial stretch of new line would be followed by a 300-metre radius curve which takes the new railway to the alignment of the Bletchley-Oxford line. This curve and its supporting embankment would extend beyond the existing railway boundary into land which is mostly designated under the Local Plan as being for transport use. A new footbridge (Work No. 8) would carry public footpath FP 129/3, a fieldpath here, over the new railway. The new railway would join the existing Bletchley-Oxford line at the new Gavray Junction, which would extend some 70 metres south west of the Tubbs Lane foot crossing (also FP 129/3). The foot crossing would be closed and a footbridge provided instead (Work No. 9).

- 4.5.7 **The railway between Gavray Junction and Oxford North Junction** (Work No.2) would result from the reconstruction of the existing Bletchley-Oxford railway. The reconstructed railway would continue from Gavray Junction with two tracks on the existing track bed, across London Road on an upgraded level crossing, and into Bicester Town station. No other level crossing would be retained on Work No. 2 or anywhere else on the Scheme. The option of closing the London Road crossing without replacement was dismissed because London Road is the only route out of Bicester to the south and the resulting diversion would be at least 2 km long and on roads not suited to accept additional traffic. Options for a bridge over the railway were explored but dismissed due to lack of space without causing major disruption. The only viable option here is to retain a level crossing and provide updated and upgraded control equipment, and so that is proposed.
- 4.5.8 **Bicester Town station** currently has one platform, only long enough for trains of 2 cars, and with only the most basic passenger facilities. It would be demolished. The new station would have two platforms, each long enough for 6-car trains and each capable of extension to accommodate 8-car trains. There would be a station building with a ticket office, passenger toilets, a shop and a passenger waiting area. A footbridge would connect the platforms and both would have sheltered waiting areas for passengers. There would be cycle parking, motorcycle parking and car parking. The access road would incorporate a turnaround for buses. The station redevelopment would require the demolition of seven industrial buildings including the Grayline coach depot and Units 8 to 12 of the McKay Trading Estate. Illustrative drawings are included in the Revised Design and Access Statement (CD/1.19/1, Annex A).
- 4.5.9 The railway would continue with two tracks through the new station and beneath the A41 road on its existing bridge. Embankment stabilisation works would be carried out to the embankment slope on the northwest side of the railway, between the A41 bridge and the bridge OXD39 which carries the railway over a brook – a distance of some 250 metres. The railway would revert to single track by means of a turnout some 220 metres to the southwest of the A41 bridge, a location provisionally named Highfield Junction.
- 4.5.10 **Between Highfield Junction and a point provisionally named Mill**

Stream Junction (some 250 metres to the southwest of the present Mill Lane level crossing in Islip), the existing single track railway would be reconstructed as a single track suitable for the operation of trains at up to 100 mph. Extensive track renewal works took place here in 2003 and it is expected that such renewed track is largely fit for reuse in the Scheme. In the event that it is found not to be, works as previously described (4.3.14) would be undertaken. Throughout this section the Phase 1/2A single track would largely remain on one side or the other of the double track formation, making easier the subsequent construction of the Phase 2B track.

- 4.5.11 The existing connection to the **Bicester Military Railway** is located about 325 metres southwest of the A41 bridge. That connection would be removed, and replaced with Work No. 5, which would incorporate a freight loop (for holding stationary trains) that would extend across the site of Langford Lane level crossing.
- 4.5.12 The **Langford Lane** level crossing would be closed and Work No. 11 (a new single carriageway road, including a new bridge over the railway) would be provided in its place. Here the Scheme promoted at the Inquiry differs from that in the published Order, as follows:
- a) The published Order Scheme allowed Work No. 11 to run in part on a north/south alignment, outside but close to the designated boundary of a Scheduled Ancient Monument covering the site of the Alchester Roman town.
 - b) Further consultation with English Heritage and the County Archaeologist, and a geophysical survey, established that the section of the Scheme identified in (a) above would cause harm to the setting of the Scheduled Ancient Monument as well as potentially affecting archaeological remains, which could be avoided if the new road followed a different alignment.
 - c) The route to be followed by Work No. 11 was therefore partly revised to that shown by Figure 1.1 of document CD/1.22/1. This Revised Alignment no longer closely follows the western boundary of the Scheduled Ancient Monument.
 - d) The revised proposal was subject to environmental assessment (CD/1.22/1). The finding was that the Revised Alignment would result in no greater impacts than the published Order proposal, except that there would be an additional minor visual impact. The Revised Alignment would cause no harm to the setting of the Scheduled Ancient Monument.
- 4.5.13 Therefore, Chiltern now supports the proposal shown by Figure 1.1 in document CD/1.22/1.
- 4.5.14 The line would continue as single track beneath Work No. 12 (a footbridge to carry users of footpath FP 398/3 over the railway, in substitution for the Merton Foot Crossing) and under the M40 motorway. A new footpath, parallel to the railway and on its eastern side, would allow users of footpath FP 398/2 to gain access to Work No. 12 so as to cross the railway.
- 4.5.15 **Manor Farm Crossing, Home Farm Crossing, Beebont Crossing,**

Holts Farm Crossing and Lane Crossing are all either private occupation level crossings or public bridleway level crossings within about 1.3 kilometres of the motorway. All would be closed, and Work No. 13 (including a road bridge about 390 metres to the southwest of Holts Farm crossing) would be provided instead. The Beebont Crossing gives access to, among other things, a nature reserve managed by the Berkshire, Buckinghamshire and Oxfordshire Wildlife Trust. The proposals for access changes in this area are shown by document CRCL/INQ/70 and described in Appendix 4 of document CRCL/P/10/B:

- a) The access changes would include:
 - Severing much of Mr P Miller's land (which relies on Home Farm crossing and is the principal SSSI farm), in particular isolating the main building on the north-west of the railway from the majority of the holding;
 - Severing a 24 hectare arable field from the rest of Manor Farm; and,
 - Preventing BBOWT (6.51.2) from accessing their Reserve with agricultural machinery, which can now be achieved from Mansmoor Road across the "Beebont" bridleway level crossing.
- b) Mr Miller's north-western building would be taken down and re-erected with a new hardstanding on the south-east side of the railway, close to but outside the SSSI land farmed by Mr Miller. An access track hardened with concrete over crushed stone, 2.7 metres wide, would be provided between the hardstanding and Mansmoor Road, in the existing bridleway (which is 12 to 15 metres wide). Tassel stonewort is present in this bridleway and its protection is the subject of a proposed planning condition. The existing north-western hardstanding would be removed and its site, which extends to 1450 square metres in the SSSI, would be returned to pasture and seeded with plant species drawn from the adjacent part of the SSSI.
- c) Manor Farm would take access to its severed field via Mansmoor Road, the new access track described in (b) above, and a further access track across Mr Miller's field in the SSSI, to the site of Home Farm crossing (which would be closed). This track, some 250 metres long and 2.7 metres wide, would be in crushed stone/concrete with any runoff to the sides, as close as possible to the railway fence line. It would also be used by Mr Miller, and would replace that which he now uses to travel between his north-western building, across the SSSI fields to Home Farm crossing.
- d) Bridleways BW398/4 and BW157/4 would be stopped up in part. A new route to connect their severed ends would be created by Work No. 13 and a new bridleway on land parcels 12c002, 12c003, 12c004 and 12c005. The new bridleway would be hardened with the minimum amount of crushed stone to an approximate width of 2.5 metres and would also be used by BBOWT and Mr Miller to gain vehicular access to their properties.

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- 4.5.16 A new public road overbridge (part of Work No. 14), designed to the standards of the Design Manual for Roads and Bridges, would pass over the railway approximately 150 metres to the northeast of Oddington level crossing. An accommodation access road would be formed on plots 14007, 14009 and 14016 to give access to land on the south-eastern side of the railway from the new public road. A new footbridge (Work No. 15) would pass over the railway at the site of the present Oddington No. 5 footpath level crossing (footpath FP318/5).
- 4.5.17 **Brookfurlong Crossing** is an occupation crossing, serving Brookfurlong Farm. It is approached by a lengthy private track from the unclassified Merton-Islip road on the south-eastern side of the railway. The track is unsurfaced but has been locally hardened by the application of stone. Alternative access to the farm is available by another private track to the north-west, leading from the B4027 Bletchington Road. Given the presence of another, equally convenient means of access to the farm, the cost of providing a bridge in place of the crossing cannot be justified. The Scheme would therefore close the Brookfurlong crossing and improve the alternative access route from the north-west. The improvements would include hardening the track surface where necessary and raising it near a brook crossing to reduce the likelihood of flooding.
- 4.5.18 **Islip station** has a single 2-car platform and a small car park. There is a shelter for passengers, and a cycle rack. In Phase 1/2A, the platform would be extended to accommodate 6-car trains. A ticket vending machine, public address system and closed circuit television would be installed. Phase 2B would see the existing platform and its new extension removed (to accommodate the new Down line) and two new 6-car platforms built, with the potential to be extended to 8-car length. There would be a footbridge between the two platforms and a new access to the Up platform from Bletchington Road. There are illustrative drawings in Annex B of the Revised Design and Access Statement, CD/1.19/1.
- 4.5.19 **Mill Lane in Islip** would be closed at its level crossing of the railway. A new footbridge, suitable for equestrian users, (part of Work No. 16) would pass over the railway about 125 metres north-east of the level crossing. Mill Stream Junction would be formed some 300 metres southwest of the Mill Lane crossing, and would be the south-western limit of the length of single track that started at Highfield junction.
- 4.5.20 The River Cherwell Viaduct would be subject to partial reconstruction, to provide the necessary strength. The embankment would be widened nearby to meet current safety standards and to remedy natural deterioration that has occurred in recent decades. Northfield Farm Bridge would be demolished, since it provides inadequate headroom for W12 gauge trains, and would be replaced by Work No. 17, some 700 metres to the southwest.
- 4.5.21 Work No. 6 includes a siding and associated run-round loop to be provided as a direct replacement for the existing **Banbury Road freight sidings**, used for the importation of aggregates to the area. The non-railway facilities associated with the aggregate depot that presently uses Banbury Road sidings would be replicated alongside Work No. 6. These
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facilities comprise aggregate stockpiles, road vehicle loading areas and access road, a weighbridge, staff accommodation and office facilities.

- 4.5.22 **Water Eaton Parkway Station** would be located next to the existing Water Eaton park and ride car park. The station would stand on the site of the present Banbury Road sidings and associated aggregate depot and a derelict former grain silo building (which would be removed). The station would serve areas of Oxford and Oxfordshire that currently have poor road access to the rail network, and to act as a local station for north Oxford and Kidlington. The proposal is described in the revised Design and Access Statement (CD/1.19/1) which also presents illustrative drawings (Annex C). The main elements of the proposal are:
- a) A 2-storey station building with about 300 square metres of gross external floorspace;
 - b) A footbridge with lift access;
 - c) A footpath ramp from the A4165 Oxford Road to the station concourse;
 - d) A dedicated rail passenger car park for 1003 spaces, with parking for cycles and motorcycles. The car park would be initially at grade but, as demand increases, part would be decked to provide two levels of car parking on this part of the site, with 186 spaces on the upper deck;
 - e) Two platforms to accommodate 8-car trains and additional services, and covered outdoor seating areas on the platforms for passengers;
 - f) The relocation of the existing aggregates depot with access improvements; and,
 - g) Access improvements to and through the existing bus-based park and ride facility, including a simplified and improved signal-controlled junction on Banbury Road.
- 4.5.23 A landscaping strategy for Water Eaton Parkway station has been developed and is shown in the revised Design and Access statement. Existing vegetation on the eastern side of the railway and on the A4165 embankment is to be retained as far as possible. New planting would be introduced to the northern boundary of the proposed car park to visually screen this from the adjacent farmland. There would be other planting within the site. A full scheme would be developed at the detailed design stage.
- 4.5.24 Work No. 18 would provide a new footbridge over the railway, at the site of the level crossing of the railway by footpath FP 229/10.
- 4.5.25 Peartree Junction, some 175 metres southwest of this new footbridge, would see the twin track through Water Eaton Parkway reduce to a single track on the approach to Wolvercot Tunnel. This single track railway would be suitable for 70 mph running in either direction.
- 4.5.26 **Wolvercot Tunnel** is some 140 metres long. Its northern portal is some 900 metres south of the proposed Peartree Junction. The tunnel has straight sidewalls with a 5-ring segmental arch spanning between. Originally built for two tracks, it has had only one (centrally located)

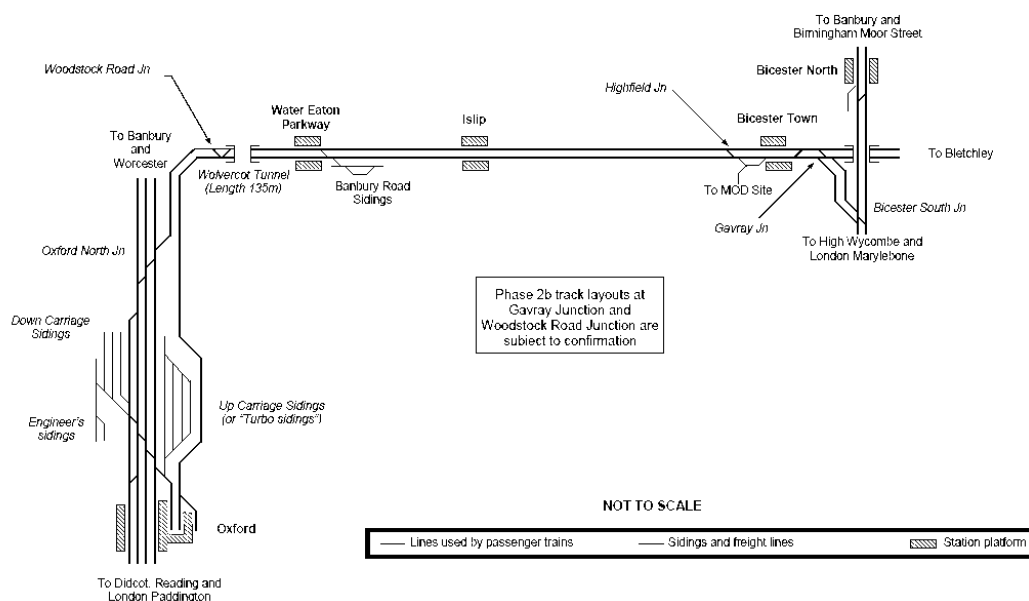
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- since 1973 and that provides clearance for container traffic up to W8 gauge. There is inadequate headroom in the tunnel to admit two-tracked W8 traffic. It is intended to operate W12 gauge freight traffic over the route once the East West Rail link is completed, and to electrify the route using overhead wires at some future date. It is therefore intended to lower the level of the track inside the tunnel and on the approaches to it.
- 4.5.27 This work would be highly disruptive to the railway and would require the closure of the line for several months. To avoid disruption to the new Oxford to Marylebone services within the first few years of operation and to avoid the cost of carrying out the works separately at a later date, the Department for Transport has agreed to fund the track lowering works as part of Phase 2A.
- 4.5.28 Structural and geotechnical investigations were incomplete at the time of the Inquiry. Depending on their outcome, it might be necessary for ground anchors to be installed through the existing tunnel side walls to prevent inward movement during and following the works.
- 4.5.29 Seventy metres to the south of First Turn bridge, a further turnout would be located. The location is provisionally named **Woodstock Road Junction**. To the south of the junction there would be two tracks which would each operate as a single-line track. One would connect to the main line at Oxford North junction (as the existing line does) and the other, on the eastern side of the formation, would be used for the Marylebone-Oxford services and perhaps also for the East West Rail services. This track would be used by trains travelling at up to 75 mph.
- 4.5.30 Various limited earthworks would be needed between Woodstock Road junction and a location some 500 metres south of Oxford North junction to widen cuttings and to stabilise embankments. Some of these works would abut a Site of Special Scientific Interest, and would be designed and built so as to cause minimal physical disturbance to the SSSI.
- 4.5.31 Work No. 2 would terminate some 200 metres north of Oxford North junction. The railway would continue south as Work No. 7 (a single-track connection to the main line) and as Work No. 3.
- 4.5.32 Work No. 3 would provide a single-track line, separate from its neighbours, to Oxford station. It would reinstate the southern part of the Bletchley to Oxford line, which closed to traffic in the mid-1980s. The reinstated track over this section would be suitable for speeds up to 75 mph.
- 4.5.33 Some 400 metres south of its commencement, Work No.3 crosses a private right of way between **Aristotle Lane** to the east of the railway and the Trap Ground Allotments to the west. They are connected by a pedestrian level crossing. In compliance with present standards, it is not intended to create a new foot crossing over the reinstated railway here. Instead, the right of way would be diverted over the adjacent Aristotle Lane footbridge, which would be retained and refurbished. This carries a bridleway to the Port Meadow area of the Oxford Meadows Special Area of Conservation. The bridleway enters Port Meadow at a location where flooding sometimes occurs and the path would therefore be raised enough to present a dry route at all times. The Order proposal to provide a new link bridge directly into the Allotments is withdrawn. The
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Order proposal to secure vehicular access rights for allotment holders across Port Meadow from Walton Well Road is withdrawn: because such a right is not necessary (as an alternative pedestrian route would be provided across the footbridge) and because Oxford City Council informally allows vehicular use of the route in question in any event. Document CRCL/INQ/50 shows the arrangement.

- 4.5.34 The new line would proceed south on railway land towards Oxford station. A short distance to the north of the station, the Bletchley to Oxford line formerly crossed the Rewley Abbey Stream, a navigable waterway. To allow boats to pass, the crossing was by a **swing bridge**. Although the railway is removed, the swing bridge remains, semi-derelict and immovable. It is designated as a Scheduled Ancient Monument. The new line would pass close to the swing bridge, although at a higher level. It would be appropriate for the planning permission for the Scheme to be subject to a condition that would require a scheme of improvements to the setting of the swing bridge, to mitigate the effect of the new railway. It would be contrary to policy in PPS5 to seek to remove a scheduled monument from its setting, but Chiltern is prepared to improve the setting of the bridge, as shown by an illustrative drawing, figure 4.7 in Appendix 4 of document CRCL/P/12/B.
- 4.5.35 The Scheme proposals for **Oxford station** are shown by illustrative drawings in the Revised Design and Access Statement (document CD/1.19/1, Annex D). The station currently has three platforms, two of which serve through trains and the third is used for trains from the north that terminate at Oxford. A new platform would be built to the north of the main station building, on the site of the former parcels docks and parcels depot building. The new platform would accommodate Chiltern trains on its western and eastern faces, would be long enough for 6-car trains, and would have a canopy for much of its length. Residential development to the north of the station tightly limits the potential for further expansion in that direction. Oxfordshire County Council is promoting a scheme to redevelop Oxford station which, if implemented, would enable the southward extension of the two new platforms proposed as part of the Scheme. Chiltern agrees to work with the County Council, Oxford City Council and First Great Western (the station facility owner) to facilitate the improvement and redevelopment of Oxford Station.
- 4.5.36 **Proposed line speeds** are shown for the whole scheme in document CRCL/P/6/G. Between the relocated aggregate depot and a point some distance south of Walton Bridge, passenger trains would travel at up to 75 mph. Chiltern has considered the proposition that trains should travel no faster than 30 mph in built-up Oxford. This would have an undesirable effect on travel times. It would also reduce the available layover time at Oxford. The layover provides a buffer reducing the chance of a late arrival at Oxford resulting in the late departure of the return working to London. Reliability is critical to the success of the Scheme and to reduce layover time would prejudice reliability. The Scheme relies on the use of existing passenger stock with time savings made possible by the Scheme and line speed improvements on the Chiltern main line to Marylebone. Further time for train running could only be secured if faster trains were bought, and the Scheme would not

be viable if that were done. The additional running time associated with any lower speed in the built up area of Oxford would jeopardise the viability of the scheme and would be unacceptable.

Bicester – Oxford line : Phase 2B track layout



- 4.5.37 **Phase 2B** would see the whole line north of Woodstock Road Junction brought to twin track standard. This would rely to a degree on works to the formation that have previously been described (4.3.14).
- 4.5.38 The rail access to the MoD site would need to be repositioned to allow the through line to be "twinned" and that relocation would include a new siding that would extend north beyond the A41 road. An additional span would be provided at the A41 overbridge, widening it as part of Phase 2B to accommodate a third track to provide revised rail access to the MoD site. The works affecting the A41 are part of the Phase 2B proposals, which will be implemented at a later date, separately from Phase 1. Document CRCL/INQ/64 identifies the following parcel numbers to be associated with this work:
- Permanent Acquisition (within the limits of deviation): 04055, 04052, 04053.
- Temporary Use (within Schedule 11): 04036, 04037, 04038, 04039, 04041, 04042, 04043, 04044, 04045, 04046, 04047, 04048, 04049, 04050, 04056, 04a001, 04a002.
- 4.5.39 Parcel number 18009 would be needed for the provision of additional parking at Islip station, which would be provided only if Phase 2B were to proceed.
- 4.5.40 Other works to the north of Woodstock Road Junction would also be needed and have already been described in this report. To the south of Woodstock Road Junction, no works are proposed as part of Phase 2B.

- 4.5.41 The Phase 2B works would be the subject of a separate contract that would form part of the wider East West Rail scheme and would proceed only if and when the EWR is authorised.

Construction Programme

- 4.5.42 The construction blockade is expected to last approximately 8-9 months, but that is subject to review as the design develops. During that period it would be necessary to maintain access to the freight facilities at Banbury Road sidings, MoD Bicester and the Calvert landfill site (east of Bicester). Therefore, the route would be closed in sections and freight services diverted via Aylesbury.

4.6 Level Crossings

Background

- 4.6.1 Level crossings on the line from Bicester to Oxford were constructed in accordance with powers conferred by the Oxford and Bletchley Junction Railway Act of 1846 (CD/5.1) as modified by the Buckinghamshire Railway Act of 1847 (CD/5.3). In 1851, when the line was first fully open, there was no expectation that railways would have grade separated crossings of pre-existing rights of way. Railway responsibility for level crossings on the line now rests with Network Rail Infrastructure Ltd ("Network Rail").

Safety Regulation

- 4.6.2 The Office of Rail Regulation is now the safety regulator for all railway safety matters in Great Britain. The current edition of the ORR's Railway Safety Principles and Guidance, dealing with level crossings, is "Railway Safety Principles and Guidance part 2 section E Guidance on Level Crossings" (document CD/3.1), first published in 1996. A successor document has been the subject of consultation but the final form of that document is not yet known.
- 4.6.3 ORR published in 2007 its "Policy on Level Crossings" (document CD/3.18) which says, among other things, that:
- Level crossings on the national rail network present the biggest risk of train accidents that could kill passengers;
 - Level crossings pose particular problems for rail companies because they cannot control the actions of drivers and pedestrians at level crossings;
 - Rail companies, highway authorities and others need to co-operate to manage safety at crossings;
 - Except in exceptional circumstances, there should be no new level crossings on any railway;
 - Everyone whose actions may affect level crossings must be more aware of what affects safety at level crossings;
 - Relevant authorities must recognise the wider benefits that safety improvements at level crossings (for example, replacing them with bridges) can bring about, particularly for road users;
 - Rail companies should take all reasonable opportunities to remove or

replace existing level crossings or make them safer, but they should also take account of the effect safety measures have on those who use level crossings and those who live or work in properties alongside them.

- 4.6.4 The Rail Safety and Standards Board is the rail industry's independent safety body. In 2006 it published a brief (CRCL/P/7/B Appendix 3) for a research report "Attitudes to, processes and funding for crossing closures". The brief says that level crossings bring no benefits to the railways; that they bring several disadvantages – for example they are hazardous to train-borne passengers; and that the first and best solution to the problem posed by level crossings is to close them. And the RSSB's 2009 publication "Taking Safe Decisions" (CRCL/P/7/B Appendix 4) says that duty holder decisions in the British railway industry which impact on safety are taken to meet legal requirements and because they are sensible from a commercial perspective; and that societal concern should not be taken into account by duty holders when deciding whether a measure is necessary to ensure safety so far as it reasonably practicable.
- 4.6.5 Network Rail's policy is set out in "Our Approach to Managing Level Crossing Safety" (CRCL/P/7/B Appendix 5): only in exceptional circumstances shall Network Rail permit new crossings to be introduced onto the network, and where reasonably practicable will seek to close or divert crossings or enhance their safety in other ways. Network Rail's policy is to use tools such as the All Level Crossing Risk Model (ALCRM) when making decisions.
- 4.6.6 The ALCRM is a computer programme that provides a method of assessing safety risk at level crossings. It is fed data from the site, of the types listed in Appendix 2 of document CRCL/P/7/E which include sighting distances. It produces an estimate of the individual risk at the crossing, ranked from A down to M, and an estimate of the collective risk at the crossing, ranked from 1 down to 13. Network Rail specifically reviews options when a score of A, B or C and/or 1, 2 or 3 results from an ALCRM assessment. The Scheme intends to remove all level crossings other than that at London Road, Bicester (the closure of which would give rise to grossly disproportionate costs) as is appropriate for a scheme such as this which rebuilds a line in modern form, but nevertheless the ALCRM has been used to evaluate the risk at each crossing.

Scheme Proposals

- 4.6.7 The various level crossings affected by the Scheme are as follows:
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Location	Type *	ACLRM with Scheme	Scheme Proposal
Tubbs Lane	Footpath	C1	Replace with footbridge
London Road	Road	G3	Upgrade and retain
Langford Lane	Road	I8	Replace with bridge: Work 11
Taylor's No. 1	Farm	C6	Proposed for closure
Elm Tree Farm No. 1	Footpath	C10	Replace with bridge: Work 11
Elm Tree Farm No. 2	Farm	C3	Replace with bridge: Work 11
College Farm No. 2	Farm	C5	Proposed for closure
Farm Crossing	Disused	None	Proposed for closure
Bonnars Crossing	Disused	D10	Proposed for closure
Merton Foot	Footpath	C10	Replace with bridge: Work 12
Wendlebury Foot	Footpath	C8	Replace with bridge: Work 12
Manor Farm	Farm	C8	Replace with bridge: Work 13
Home Farm	Farm	C6	Replace with bridge: Work 13
Beebont	Bridleway	C8	Replace with bridge: Work 13
Holt's Farm	Farm	B4	Replace with bridge: Work 13
"Lane" Crossing	Closed	None	Remove all traces
"Footbridge" Crossing	Closed	None	All traces already removed
Oddington Foot	Footpath	C10	Replace with bridge: Work 14
Oddington Grange	Farm	B5	Proposed for closure
Yew Tree Farm	Footpath	C10	Replace with bridge: Work 14
Oddington	Road	G7	Replace with bridge: Work 14
Islip Foot	Footpath	C6	Replace with bridge: Work 14
Oddington No.5	Footpath	C8	Replace with bridge: Work 15
Brookfurlong Farm	Farm	B2	Proposed for closure
Islip No. 4	Footpath	C8	Replace with bridge: Work 15
Manor Farm No.1 **	Dormant	M13	Not used: hence closure
Mill Lane, Islip	Road	B2	Bridleway bridge: Work 16
Mill Farm	Farm	C8	Close. Alternative exists.
Northfield Farm	Redundant	M13	Not used: hence closure
Water Eaton No.5	Bridleway	C5	Replace with bridge: Work 17
Gosford & W Eaton 4	Footpath	C10	Divert footpath: A4165, A34
Coults	Closed	None	Remove all traces
Gosford & WEaton 10	Footpath	C10	Replace with bridge: Work 18
Nesbitt's	Disused	M13	Proposed for closure
St Edward's	Disused	M13	Proposed for closure
Aristotle Lane	Private FP	C3	Close. Bridge nearby.
* Note: "Farm" = accommodation crossing; Private FP = private foot crossing.			
** Note: Manor Farm No. 1 crossing is also known as "Crossing crossing".			

- 4.6.8 The Scheme addresses the safety risks associated with existing level crossings on the Bicester to Oxford railway as they are now and as they would be with the Scheme. The opportunity must be taken to eliminate level crossings so far as is reasonably practical, and is consistent with the generality of policies of the Office of Rail Regulation and of Network Rail. Other than at London Road, there are no exceptional grounds on which retention of any of the level crossings on the route could be justified.
- 4.6.9 Sketch layouts and elevations for Holts Farm/Beebont bridge, Oddington

Road bridge and Water Eaton Number 5/Northfield Farm bridge are reproduced in Annex F of the Revised Design and Access Statement January 2011 (CD/1.19/1). Annex G of the same document shows general arrangement drawings for Langford Lane as originally promoted through the published Order, and the proposed modification.

4.7 **Road Transport Impacts and Management**

Local Transport Network

- 4.7.1 **In Bicester:** The existing vehicular access to Bicester Town station is from Station Approach, a single-carriageway cul de sac some 5.5 metres wide. This also serves the McKay Trading Estate and several business and industrial units. Station Approach meets London Road (B4100) at a simple priority T-junction some 75 metres north of the level crossing. Beyond the level crossing, London Road leads within about 1 kilometre to the roundabout junction of the main A41 road and the A4421 Bicester bypass. Bicester Shopping Village is to the south-west of the Town station. Figure 11.5 of Volume 3 of the Environmental Statement (CD/1.17) presents a map of Bicester.
- 4.7.2 Pedestrians and cyclists can reach Bicester Town station by several routes, as shown by Figure 11.3 of Volume 3 of the Environmental Statement. A bus service (number 22/23) calls in Station Approach during the morning and evening peak periods. At other times, it and service S5 provide hourly services at bus stops on London Road some 200 metres from the station.
- 4.7.3 The Scheme would provide the following measures here for pedestrians, cyclists and bus passengers:
- a) New pedestrian crossings on London Road, north and south of the railway;
 - b) A bus turning area, two bus parking bays and a taxi rank.
- 4.7.4 **At Islip** the station takes access from Bletchington Road (B4027), which leads from the village to the A34 trunk road. Near the station, Bletchington Road is about 5 metres wide and traffic calmed. Figure 11.8 of Volume 3 of the Environmental Statement shows a map of Islip. There are footways on the village roads near the station but no dedicated cycle facilities, but the roads are lightly trafficked and the topography generally flat and those factors are conducive to cycling. A bus calls in the village twice a day on Mondays to Fridays and once on Saturdays; the bus stop is in the High Street some 500 metres from the station. Islip station would remain principally for local community use, with no highway works in Phase 1 and footway alterations and the additions of two disabled car parking spaces in Phase 2.
- 4.7.5 **Water Eaton Parkway Station** would be next to the existing bus park and ride site at Water Eaton, south of the A34 and the railway and east of the A4165, known as Banbury Road in Oxford and as Oxford Road in Kidlington. The A4165 bridges over the A34 approximately 350 metres north of the access to the park and ride site and connects to Oxford Road and Frieze Way (both designated A4260) and Bicester Road at the Kidlington Roundabout, approximately 750 metres further north. Bicester Road gives access to and from the A34 north-east of Kidlington,

while the A4260 connects to the A44 (Woodstock Road) and gives access to the A34 at the Peartree interchange. Figure 11.11 of Volume 3 of the Environmental Statement shows a map of the area. Traffic surveys undertaken in June 2009 found two-way 12-hour flows (07:00 to 19:00) of over 52,000 vehicles on the A34 near Water Eaton, and over 15,000 vehicles on the A4165 at Water Eaton.

- 4.7.6 Currently, access to the bus park and ride site is taken from a linked double traffic signal controlled junction which also gives access to the rail aggregates depot. This is a complex arrangement that does not operate efficiently. Queuing traffic regularly extends to and often through the Kidlington Roundabout which, in turn, creates congestion on the approaches to the roundabout.
- 4.7.7 National Cycle Route 51 connects Bicester with Oxford and, near the site, runs along each side of the A4165. There is no controlled pedestrian or cyclist crossing of the A4165 near the bus park and ride site. Various public footpaths and bridleways are in the area, as shown by figure 11.9 of Volume 3 of the Environmental Statement.
- 4.7.8 The Water Eaton bus park and ride facility provides direct links to Oxford city centre and to Oxford's hospitals. There are some 800 car parking spaces, and two main bus services: service 700 operates every 15 minutes and service 500 operates every 20 minutes. The A4165 is a main transport corridor to and from Oxford and, on weekdays, some 30 buses per hour to and from Oxford pass the site, calling at bus stops about 20 metres south of the site access.
- 4.7.9 The Scheme would provide the following measures here for pedestrians, cyclists and bus passengers: :
- a) Direct pedestrian access from the A4165 via a new ramp to the station and car parks;
 - b) Bus stops on the A4165 would be relocated northwards to be close to the station building;
 - c) A new pedestrian and cyclist ("Toucan") crossing of the A4165 near the new (relocated) bus stops; and,
 - d) Improved cycle access to the site.
- 4.7.10 **Oxford station** and its surroundings are shown on figure 11.15 of Volume 3 of the Environmental Statement. The station is on the north side of the A420 Botley Road, which connects the city centre to the A34 on the western side of the city. There is parking for some 600 cycles, a vehicle drop-off/pick-up area, and access to 12 regular bus routes with service frequencies of between 5 minutes and hourly.

Transport Policy Context

- 4.7.11 The scheme is consistent with the following European, national and regional policies:
- a) The European Commission's white paper *European Transport Policy For 2010: Time To Decide* (document CD/3.7), which emphasises the importance of rail transport to the revitalisation of the railways (page 13) and promises priority to building railway lines (page 16). The Scheme would provide a

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- high quality rail service, consistent with those aims.
- b) Key objectives of Planning Policy Guidance 13 *Transport* (X/14) include promoting better integration between different transport modes, allowing more sustainable transport choices and reducing the need to travel by car. PPG13 seeks to maximise the potential use of public transport by establishing a high quality, safe, secure and reliable public transport network with good interchanges which match the pattern of travel demand.
 - c) *The Future Of Transport: A Network For 2030* (CD/3.9) builds a strategy based around three central themes: sustained investment, improvements in transport management and planning ahead. Railways are a vital part of the country's transport infrastructure, and will play an important role in meeting the increasing demand for travel (page 52).
 - d) *The Future Of Rail* (2004) (CD/3.10) sees investment in railway capacity as vital and essential in alleviating road congestion and overcrowding on public transport. Passenger rail is well-suited to deliver long distance travel and to serve concentrated markets such as commuters into large urban areas.
 - e) The Eddington Transport Study (CD/3.17) recommends that investment should focus on enhancing the capacity and reliability of the network where overcrowding and congestion problems show that the transport system is coming under strain.
 - f) The Department for Transport's *Delivering A Sustainable Railway* (CD/3.19) provides a strategic basis for prioritising increased railway capacity in response to record passenger numbers, overcrowding problems, and to create "headroom" for rail to grow further.
 - g) *Towards A Sustainable Transport System* recognises that rail can contribute to low-carbon economic growth but needs to move towards the service quality that more exacting consumers increasingly demand. *Low Carbon Transport: A Greener Future* (CD/3.21) supports the view that improving rail encourages travellers to switch from other modes. The *Planning And Climate Change Supplement* to PPS1 (CD/3.16) encourages the use of sustainable transport to move toward low carbon emissions.
 - h) The Order Scheme is referred to in a number of regional transport strategies and investment programmes.
 - i) Documents such as the *Great Western Route Utilisation Strategy March 2010* (the "RUS", CD/3.31) include the Scheme as a committed project (recommended for implementation) and an essential component of increased rail passenger capacity in the Oxford to London corridor. The RUS has been the subject of consultation. It finds that the proposed station
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capacity enhancement schemes for London Paddington, Oxford and elsewhere would address current passenger congestion issues and provide sufficient capacity to cater for predicted growth.

- j) Policy T9 of *The South East Regional Transport Strategy 2004* (CD/4.1) sought to increase opportunities for interchange between public transport and other modes. The A34 is seen as a strategic movement corridor (paragraph 9.12) capable of delivering multi-modal access to Oxford. The priority for the western policy area, in which the Scheme lies, is to improve functionality of road and rail links within and to the area (paragraph 9.84). There should be more effective co-location of rail and bus stations where regional hubs, such as Oxford, are served by rail (paragraph 9.26).
- k) Chapter 8 of the *South East Plan* (CD/4.11) has replaced the *South East Regional Transport Strategy*. The vision is for a high quality transport system and, in paragraph 8.46, the A34 corridor is identified as a priority transport link likely to come under increasing transport pressure.
- l) The *South East Regional Economic Strategy 2006-2016* (CD/4.7) recognises that economic growth can be achieved through reducing road congestion and pollution levels by improving travel choice, promoting public transport, managing demand and facilitating modal shifts (page 5). Policy CO5 prioritises access to Oxford from major towns in the sub-region. This policy seeks to improve transport links between main settlements, such as Oxford, by sustainable means including improved rail services in the A34 corridor and local Park and Ride facilities (paragraph 22.23). Re-opening the East West Rail line, which the Scheme would facilitate, is seen as a priority.

4.7.12 Local policy refers to the Scheme or provides a supportive context in various ways:

- a) The adopted Oxfordshire *Local Transport Plan* (CD/4.6), current at the time of the Inquiry, covered the period to March 2011. It sought to promote increased use of the railway, the implementation of East West Rail and improved interchange between bus and rail. It considered that enhancement of the Bicester to Oxford line is a proposed solution to overcome severe traffic congestion on the M40 and A34. The proposed park and ride facility at Water Eaton Parkway is an integral part of the Scheme and part of the "solution" to traffic congestion in the area. The Scheme is wholly in accordance with the County Council's transport vision for Oxfordshire.
- b) The emerging *Oxfordshire Local Transport Plan 2011-2030* is expected to focus on attracting and supporting economic investment, growth, better transport infrastructure, and services to tackle congestion and improve quality of life. Draft Policy R4 (CRCL/P/8/B, appendix 14) has been the subject of

consultation and was approved by Cabinet in July 2010. It expresses support for proposals for strategic enhancements for the rail network and the intention for the County Council to work with the rail industry to facilitate these and to secure funding as required, including:

- o The East West Rail scheme;
 - o The Chiltern Railways Evergreen 3 project; and,
 - o Electrification of the Great Western line.
- c) In the adopted *Cherwell Local Plan 1996*, Policy TR4 expressed support for an effective public transport system, but has not been saved (CRCL/INQ/40). The non-statutory *Cherwell Local Plan 2011* says, in Policy TR10, that proposals that facilitate the provision or enhancement of rail infrastructure, stations and services will be permitted. Policy S17 provides for railway-related uses associated with the operation of the existing station at Bicester Town, and Policy TR29 reserves land for a connecting railway and rail-based public transport interchange at Gavray Drive, Bicester. The Cherwell Draft Core Strategy, at paragraph B.4, refers to the Scheme and notes the intention of Chiltern Railways to implement it.
- d) The adopted *Oxford Local Plan 2001-2016* (CD/4.3) says in paragraph 3.8.14 that demand for stopping-services at Oxford station is outgrowing its capacity and the City Council would support its expansion. Saved Policy TR.10 says that the City Council will support and, where relevant, grant planning permission for appropriate increases in capacity for stopping train services in Oxford; and that planning permission will be granted for improved access arrangement into the station, and for improved passenger-waiting and cycle-parking facilities. The Oxford Core Strategy 2026 Proposed Submission says in its narrative text at section 3.1 that Oxford's transport network is constrained, with very limited potential to increase space on road and rail; that the Council will support the delivery of transport schemes that aim to reduce the need to travel by private car and improve accessibility within and to Oxford by non-car modes; and that the Council will work with partners towards (among other things) implementation of East West Rail and improvements to the Bicester line.

4.7.13 The Scheme is wholly consistent with European, national and local transport planning policies in that it would:

- Deliver new rail infrastructure between Oxford and Bicester including a new parkway station at Water Eaton;
- Promote increased use of the railway between Oxford and Bicester and on to London and intermediate destinations;
- Assist the delivery of the East West Rail proposals;
- Improve facilities and access to Bicester Town station, creating a new public transport interchange;

- Provide improvements to Islip station; and,
- Assist with longer term improvements to Oxford station.

Road Transport Impacts

- 4.7.14 The Scheme does not include an increase in car parking provision at Oxford station and consequently the Scheme would have no more than a negligible effect on traffic there. Islip station will remain principally for local community use, rather than as a facility for the wider area, and the Scheme would give rise to a negligible change in traffic flows there. Various layout configurations were considered for road access at Bicester Town station and at Water Eaton Parkway station, and the overall optima selected.
- 4.7.15 Construction traffic impacts were assessed with reference to the construction method summarised in Chapter 2 of the Environmental Statement (CD/1.15) and the Code of Construction Practice included at Annex B of the Environmental Statement (CD/1.18). Restrictions and methods of control to ensure regulation of construction traffic are detailed in the revised draft Code of Construction Practice for the Scheme (CD/1.24). Construction traffic would not cause significant delay or inconvenience to other road users.
- 4.7.16 Operational traffic impacts were assessed “strategically” for the Environmental Statement using Oxfordshire County Council’s multi-modal Central Oxfordshire Transport Model (“COTM”), which incorporates a SATURN (Simulation and Assignment of Traffic in Urban Road Networks) model of the Scheme rail passenger catchment and incorporated some network refinements. COTM models the highway peak hours (0800 to 0900 and 1700 to 1800). Details of the modelling inputs are provided in Appendix 1 of document CRCL/P/8/B. The modelled area is shown by the drawing in Appendix 2 of CRCL/P/8/B to include Oxford as far south as to include the City centre, Bicester and a broader area extending from Carterton in the south-west to Silverstone in the north-east.
- 4.7.17 The more detailed local assessments used micro-simulation (S-Paramics) modelling. Rail passenger demand forecasts were used to test the effect of the Scheme, including the proposed highway junction works, on the immediate highway network, over the highway peak periods (0700 to 1000 and 1600 to 1900).
- 4.7.18 After Chiltern made its submission of the Order application in January 2010, Oxfordshire County Council as local highway authority and the Highways Agency as highway authority for the A34 trunk road asked whether the additional traffic travelling to and from the new Water Eaton Parkway station would result in unacceptable impacts on the local highway network or the Peartree A34/A44 interchange. Further work was undertaken as a result, using a method that had been agreed with both highway authorities (CD/2.23, CD/2.24, CD/2.25). The findings are accepted by the Highways Agency (CRCL/P/8/F) and by the County Council.
- 4.7.19 Findings of the analysis are summarised in the Environmental Statement and include (among others) the following:

Location	Forecast 2-way traffic flows			
	2016 Do-minimum	2016 with scheme	2026 Do-minimum	2026 with scheme
AM Peak Hour (0800 to 0900) (ES Vol 3 Figs 11.28 and 11.32)				
Park & ride entrance	230	330	228	345
A4165 south of site	1323	1406	1684	1601
A4165 north of site	1624	1669	1983	1852
A34 south of Peartree	7772	7792	7770	7789
Oxford station	370	369	382	382
PM Peak Hour (1700 to 1800) (ES Vol 3 Figs 11.29 and 11.33)				
Park & ride entrance	185	214	190	218
A4165 south of site	1684	1645	1936	1817
A4165 north of site	1872	1833	2124	2007
A34 south of Peartree	7934	7916	7995	7941
Oxford station	249	250	269	268

- 4.7.20 Network-wide, the Scheme would reduce total road vehicle travel distance (by 3,356 passenger car unit kilometres in the 2016 AM peak hour), reduce the average travel distance per trip (by 0.06 passenger car unit kilometres in the 2016 AM peak hour), and reduce carbon dioxide emissions per trip (by 2 grams). The number of road vehicle trips would increase by 89 in the same period. 139 car trips would transfer to rail during the AM and PM peak hours in 2016, and 175 during each peak hour in 2026.
- 4.7.21 The A34 trunk road corridor near Water Eaton typically operates at or near to capacity during the highway peak hours, hence only slight changes in overall traffic flows were to be expected as a result of the Scheme; and the model shows that to be so. Accordingly, the Environmental Statement concludes that the Scheme would result in changes of slight to negligible significance on the A34(T) traffic flows, and no mitigation is necessary.
- 4.7.22 The overall residual effects of the Scheme, with its mitigation measures, would be to provide:
- a) Reductions in highway journey times;
 - b) Reductions in traffic queues;
 - c) An increase in overall average traffic speeds through the network; and,
 - d) An associated reduction in carbon dioxide emissions.
- 4.7.23 Those benefits are summarised, by way of example, for the 2016 AM peak hour, in the following table:

Central Oxfordshire Transport Model (SATURN) Simulation Summary Statistics – 2016 AM Highway Peak Hour (08:00 to 09:00)
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Case	Total Journey Time (hrs)	Total Journey Distance (km)	Overall Average Speed (kph)	CO ₂ Emissions (kg)	Over-Capacity Queues (hrs)	Total Trips (pcus)
Without Scheme	20669	1254779	60.7	76649	1157	76907
With Scheme	20475	1245891	60.9	76492	1092	76884
Benefits of Scheme	-195	-8888	+0.2	-157	-65	-23

4.7.24 An S-Paramics microsimulation traffic model of London Road, Bicester, near Bicester Town station, was prepared and included detailed rail service timetabling as it would affect the London Road level crossing. The results are presented in the report *S-Paramics Microsimulation Traffic Model of London Road, Bicester (Bicester Town Station) Model Developing And Forecasting Report* (document CD/2.24). This studies the effect of the level crossing closures on traffic along London Road during the morning and evening peak hours (0800 to 0900 and 1700 to 1800). Closures of 2 minutes (the normal circumstance for passenger services) and 3 minutes (as a sensitivity test) were simulated, as were the different numbers of trains per hour with the Scheme proposal alone and with the East West Rail scheme added and the effect of traffic growth, for which TEMPRO and NTM were interrogated.

4.7.25 Journey times were assessed for the journey along London Road between the market place in central Bicester and the junction of London Road with the A41 road, on the outskirts of the town. The average journey times were estimated to be as follows:

Average Journey Times In Seconds For London Road Traffic					
Case	Closures	AM Peak		PM Peak	
		N/bound	S/bound	N/bound	S/bound
2009 Base Year		106	117	108	122
2016 with Scheme	2 min	120	130	124	139
2016 with Scheme	3 min	129	139	135	151
2026 with Scheme	2 min	123	138	128	154
2026 with Scheme	3 min	131	149	139	170
2026 Scheme + EWR	2 min	132	146	138	159
2026 Scheme + EWR	3 min	147	164	154	182

4.7.26 Maximum traffic queue lengths at London Road level crossing have also been estimated for the future scenarios previously considered:

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Maximum Queue Lengths In Vehicles At London Road Level Crossing					
Case	Closures	AM Peak		PM Peak	
		N/bound	S/bound	N/bound	S/bound
2016 with Scheme	2 min	21	27	29	29
2016 with Scheme	3 min	30	35	35	38
2026 with Scheme	2 min	26	34	31	30
2026 with Scheme	3 min	32	38	36	39
2026 Scheme + EWR	2 min	24	30	26	28
2026 Scheme + EWR	3 min	31	37	35	37

- 4.7.27 The traffic effects of the Scheme in Bicester generally have been assessed using Oxfordshire County Council's Central Oxfordshire Transport Model, an application of the standard SATURN software. The model meets the DMRB validation acceptability guidelines in the Study Area. The difference in network performance resulting from the scheme is found by the model to be negligible.

Station Layout, Access, Parking and Drop-Off Arrangements

- 4.7.28 The proposals are appropriate to accommodate the forecast rail passenger requirements, including predicted demand for the parking of cycles, motor cycles and cars. The proposed highway works at Bicester Town station and at Water Eaton Parkway station have been subject to independent Stage 1 road safety audits and no significant design issues were identified.

Construction Traffic

- 4.7.29 The construction strategy envisages that, where feasible and reasonable, bulk material delivery and waste removal would be carried by rail, thus minimising the effects of scheme construction on road traffic. Nevertheless, the construction traffic assessment in the Environmental Statement is based on the "worst case" in which all construction-related haulage is by road. There would also be an element of other road-based construction-related traffic, moving personnel and non-bulk materials.
- 4.7.30 Construction traffic would be managed through the Code of Construction Practice Revision Two Draft (CD/1.24). Routes for construction vehicles would be agreed with the local highway authority and the Highways Agency.
- 4.7.31 Generally, construction traffic would temporarily add less than 100 vehicles per day on the major road network, and less than 50 vehicles per day on minor roads. Occasionally, and for limited periods, construction might add more than 100 vehicles per day to the major road network, and more than 50 vehicles per day on minor roads.

4.8 Noise and Vibration

Baseline Noise

- 4.8.1 Baseline noise levels were measured at receptors along the Scheme, chosen to identify the existing noise climate in areas most likely to be affected by the Scheme. Measurements were made of the existing noise

environment during the day-time and night-time in accordance with BS 7445 Description and Measurement of Environmental Noise. Class 1 sound level meters were used, all of which were calibrated before use and checked after surveying. No deviation of more than 1 dB was noted.

- 4.8.2 Ambient noise levels were found to vary from time to time, and in general the lowest ambient L_{Aeq} levels have been used to ensure a worst-case assessment.

Construction Noise

- 4.8.3 To evaluate the impact of construction noise it is necessary to establish criteria above which some noticeable adverse effect may be experienced. British Standard BS 5228 *Code of Practice for Noise and Vibration Control on Construction and Open Sites, Part 1: Noise* (CD/5.27) ("BS 5228") presents at table E1 the following example thresholds of significant effects at dwellings:

Assessment Category and threshold value period (L_{Aeq})	Threshold value, decibels (dB) at dwellings		
	Category A	Category B	Category C
Night-time (2300-0700)	45	50	55
1900-2300 weekdays, 1300-2300 Saturdays, 0700-2300 Sundays	55	60	65
Daytime (0700-1900) weekdays, Saturdays (0700-1300)	65	70	75
Note 1 – A significant effect has been deemed to occur if the total L_{Aeq} noise level, including construction, exceeds the threshold level for the Category appropriate to the ambient noise level.			
Note 2 – If the ambient noise level exceeds the threshold values given in the table, then a significant effect is deemed to occur if the total L_{Aeq} noise level for the period increases by more than 3 dB due to construction activity.			
Category A: threshold values to use when ambient noise levels (when rounded to the nearest 5dB) are less than these values.			
Category B: threshold values to use when ambient noise levels (when rounded to the nearest 5dB) are the same as category A values.			
Category C: threshold values to use when ambient noise levels (when rounded to the nearest 5dB) are higher than category A values.			

- 4.8.4 The following table is derived from BS 5228 and other published guidance. It defines thresholds above which a significant construction noise impact is considered to occur:

/over

Criteria for Defining Significant Noise Impacts During Construction			
Period	Use of building	Threshold for Significant Impact (façade) $L_{Aeq,T}^{(1)}$	Purpose
Daytime (0700-1900)	Dwelling/office	70 dB	Maintain speech intelligibility
	Educational buildings	65 dB	Maintain speech intelligibility
Evening (1900-2300)	Dwellings	65 dB	Avoid disturbance
Night (2300-0700)	Dwellings	45 dB ⁽²⁾	Avoid sleep disturbance

(1) L_{Aeq} over the time intervals shown except at night when L_{Aeq} over 1 hour is used

(2) or equal to ambient L_{Aeq} levels if ambient noise is higher than 45 dB.

- 4.8.5 Construction of the Scheme will largely take place during the day. Normal hours of work are expected to be Monday to Friday from 0700 to 1900 hours and on Saturdays from 0800 to 1300 hours, although work may be undertaken outside normal hours of work after consultation with the local authority.
- 4.8.6 Construction noise levels have been predicted using the method set out in BS 5228 and on the basis of plant and equipment likely to be used at the site. The contractor would follow the procedures in the Code of Construction Practice Revision 2 Draft (CD/1.24) to mitigate noise from construction sites. (The same document addresses vibration, dust & air pollution, and contaminated land & materials.) The normal provisions of section 61 of the Control of Pollution Act 1974 would apply.
- 4.8.7 The Code of Construction Practice Revision 2 Draft says that subject to the requirements of the local authority, best practicable means shall be used to ensure, as far as possible, that the maximum free-field noise level at any occupied dwelling or other building used for residential purposes, generated by construction plant and equipment should not normally exceed the following limits:

Monday to Friday	0700 - 1900	12 hours	70 dB L_{Aeq}
Monday to Friday	1900 - 2300	4 hours	60 dB L_{Aeq}
Saturday	0700 - 1300	6 hours	70 dB L_{Aeq}
Saturday	1300 - 2300	10 hours	60 dB L_{Aeq}
Sunday and Public Holidays	0700 - 2300	16 hours	55 dB L_{Aeq}

- 4.8.8 Noise limits for work at night (2300 to 0700 hours) would be agreed with the local authority as part of the Section 61 agreement, depending on local conditions, with a default value of L_{Aeq} 55dB (1 hour).
- 4.8.9 When noise levels are predicted to exceed these levels, the expected

exceedences are to be notified to the local authority in advance as part of the Section 61 application process. A programme of noise monitoring is to be agreed with the local authority.

Operational Noise

- 4.8.10 The assessment methodology is set out in Chapter 6 and Volume 4, Annex D of the Environmental Statement (CD/1.16, CD/1.18).
- 4.8.11 There are no statutory limits on operational noise from railways in the UK. To assess the noise effects of the Scheme an assessment methodology has been developed that considers absolute threshold of train noise impact and also the extent to which train noise would increase existing ambient levels.
- 4.8.12 Planning Policy Guidance Note 24 *Planning and Noise* (CD/3.4) ("PPG24") identifies noise exposure categories. NEC A represents the external noise levels at which noise need not be considered as a determining factor in granting planning permission for new housing, and those are:
 - For daytime noise L_{Aeq} 0700-2300 hours: 55 dB
 - For night-time noise, L_{Aeq} , 2300-0700 hours: 45 dB.
- 4.8.13 The basis of these NEC levels is a large body of research that found that at levels below these, few people are annoyed by noise. The National Noise Incidence Study 2000 found that $55 \pm 3\%$ of the population of England and Wales live in dwellings exposed to day-time noise levels above 55 dB $L_{Aeq, day}$ and $68 \pm 3\%$ of the population live in dwellings exposed to night-time noise levels above 45 dB $L_{Aeq, night}$. The threshold levels are stringent assessment criteria to adopt. They should not be applied in isolation without consideration of pre-existing ambient noise levels.
- 4.8.14 The Noise Insulation (Railways and Other Guided Transport Systems) Regulations 1996 (CD/5.13) impose a duty on the operators of railways to offer a package of noise insulation and associated measures for living rooms and bedrooms in dwellings and other residential buildings. They apply to new or modified railway systems that are approved under the Transport and Works Act. Insulation is discretionary in the case of altered systems but mandatory for re-opened long-disused systems or for new or extended systems. The trigger noise levels (free-field, that is, away from reflective surfaces) for the provision of noise insulation are:
 - 66 dB L_{Aeq} daytime: Daytime is defined as 0600-2400 hours;
 - 61 dB L_{Aeq} night: Night is defined as 2400-0600 hours.
- 4.8.15 It should be noted that the noise insulation trigger levels in the Regulations are quoted as 68 dB for daytime and 63 dB for night, but those include the "façade" correction of 2.5 dB. The equivalent free-field levels are 66 dB and 61 dB (to the nearest decibel). The trigger is also such that vehicles on the transport system must cause noise levels to increase by at least 1 dB and the new, altered or extended part must contribute at least 1 dB to the total noise. The assessment is to be made at the facades of residential buildings within 300 metres of the transport system.
- 4.8.16 The assessment of noise from trains using the Scheme adopts a

combination of both approaches and also recognises the effect of ambient noise. The noise assessment criteria are summarised thus:

Summary of Noise Assessment Criteria (Free-field)		
Predicted Train Noise Level L _{Aeq, period}	Increase in Ambient (L _{Aeq, period}) Noise or Exceedence of Threshold (free-field)	Impact Descriptor
Case 1 – Train noise below noise impact thresholds		
Day <55dB (0700-2300 hrs)	Not applicable	No impact
Night <45dB(2300-0700 hrs)	Not applicable	No impact
Case 2 – Train noise between noise impact thresholds and noise insulation triggers		
Day	<1 dB	No impact
>55dB (0700-2300 hrs)	1 to 3 dB ⁽¹⁾	Slight impact
<61 dB (0000-0600 hrs)	3 to 5 dB	Moderate impact
	5 to 10 dB	Substantial impact
	>10 dB	High Impact
Night	<1 dB	No impact
>45 dB (2300-0700 hrs)	1 to 3 dB	Slight impact
<61 dB(0000-0600 hrs)	3 to 5 dB	Moderate impact
	5 to 10 dB	Substantial impact
	>10 dB	High Impact
Case 3 – above noise insulation triggers		
Day > 66 dB (0600-0000 hrs)	>1 dB	Significant impact, noise insulation triggered
Night > 61 dB(0000-0600 hrs)	>1 dB	
(1) – Where increases are at the border between two impact descriptors, the impact is described as the less significant of the two. In Case 2 the lower of the noise change and exceedence of threshold values determines the impact.		

- 4.8.17 In addition, if the maximum pass-by free-field noise (L_{Amax} , the instantaneous "peak" as the train passes) regularly exceeds 82 dB, a significant impact is considered to occur, based on guidance on the prevention of sleep disturbance in PPG24, except where ambient maximum noise levels are already above the predicted train noise level. PPG24 says that "sites where individual noise events regularly exceed 82 dB L_{Amax} (S time weighting) several times in any hour should be treated as being in NEC C, regardless of the $L_{Aeq,8h}$ (except where the $L_{Aeq,8h}$ already puts the site in NEC D)".
- 4.8.18 Such an approach has been used on various other rail schemes in the UK.
- 4.8.19 Noise from the operation of the railway has been predicted using the Calculation of Railway Noise procedure ("CRN") developed by the Department of Transport in 1995 (CD/5.12). CRN is based on real measurements of many of the types of train that are expected as a result of the Scheme. It estimates noise levels in terms of the noise level over a period, L_{Aeq} , as required by Statutory Instrument 1996 No. 428 *The Noise Insulation (Railways and Other Guided Transport Systems) Regulations 1996* (CD/5.13).

- 4.8.20 The Environmental Statement provides the following example residual external noise impacts, with allowance made for potential noise barriers. Further mitigation by other means will be considered where necessary:

Location	Example Residual Noise Impact (dB) With Potential Noise Barriers	
	Phase 1 scheme	Phase 2 scheme
Whimbrel Close	9	16
Langford Village	6 (no barrier)	2 (with barrier)
Alchester House	No significant change	5
Holts Farm	No significant change	2
Oddington Crossing House	6. Max. more than 82 dB	13. Maximum more than 82 dB
Islip station house	3. Maximum 84 dB.	3. Maximum 84 dB.
Closest properties on Kidlington Rd, Islip	No significant change	8.
Kareol, Mill Lane, Islip	12	16
Mill Farm, Islip	8	15
Northfield Cottages	6	12
Lakeside	No residual impact	2
St Peter's Road	No residual impact	8 at 1 st floor at Quadrangle House and Bladon Close near the railway. 2 at ground floor. Maximum more than 82 dB.
Cox's Ground	6 (no barrier)	With barrier: 4 at top floor. 1 at first floor.
Merrivale Square	3	6 at top floor. 2 at first floor.

- 4.8.21 Wolvercote School would experience a daytime $L_{Aeq,18hr}$ free-field noise level of 59 dB (an increase of 12 dB) with Phase 2 of the Scheme and no mitigation; but there is the potential to provide mitigation in the form of a noise barrier alongside the railway, which would reduce the noise impact there. The residual impact is estimated to be zero.

- 4.8.22 Document CD/1.29/2 sets out the Noise and Vibration Mitigation Policy, described in more detail in paragraph 4.8.31 of this report.

Construction Vibration

- 4.8.23 Vibration from the construction of the Scheme has the potential to disturb sensitive receptors near those works. Objective criteria have been established for evaluating the significance of vibration during construction; those criteria are based on the Peak Particle Velocity as defined by British Standard BS 7385 Part 2, 1993. Limits would be set

for people in dwellings, people in commercial buildings, and to avoid building damage.

- 4.8.24 The Environmental Statement considers the effects of construction vibration. Vibration effects would be controlled in accordance with the Revised Draft Code of Construction Practice (CD/1.24).

Operational Vibration

- 4.8.25 Train movements have the potential to cause impacts through vibration, causing building occupiers to perceive vibration and at certain levels to become annoyed by it.
- 4.8.26 Vibration Dose Value ("VDV") is a measure of the accumulated level of ground vibration over a period and, based on the guidance of BS 6472 (CD/5.26, British Standard BS6472-1:2008 *Guide to the evaluation of human exposure to vibration in buildings. Part 1: Vibration sources other than blasting*), is the standard metric for predicting the likelihood of adverse comments from affected building occupants. PPG24 indicates that BS 6472 should be used to assess vibration, but there is no guidance as to what is an acceptable level of disturbance. It is usually considered that the objective should be to avoid vibration levels where adverse comment would be probable. BS 6472 gives the following VDV levels at or below which the probability of adverse comments is low, and those criteria are used as the basis of the assessment:
- Day (0700-2300 hrs): 0.4 m/s^{1.75}; and
 - Night (2300-0700 hrs): 0.2 m/s^{1.75}.
- 4.8.27 There may also be concern that vibration from trains could damage building structures. Vibration levels above which damage might occur are given in Part 2 of BS 5228 (CD/5.28). Cosmetic damage might occur in reinforced or framed buildings if the PPV exceeds 50 mm/s, or in unreinforced or light framed buildings (typical of residential buildings) if the PPV exceeds 15 mm/s. Vibration from trains at these levels arriving at adjacent properties is highly unlikely.
- 4.8.28 Ground borne noise (noise radiating from surfaces within a building as a result of ground vibration) from the Scheme will generally be at levels below that arriving via the airborne path, and so is generally more of a concern for underground railways where airborne noise is absent. But particularly noise-sensitive buildings such as sound recording studios that are particularly well insulated against external airborne noise sources could potentially be affected: but there are no such buildings near the Scheme.
- 4.8.29 Levels of ground vibration that may be experienced with the Scheme have been estimated on the basis of measured vibration levels of similar trains to those that would use the Scheme, measured at Kings Sutton, a site adjacent to the London Marylebone-Banbury main line where that line is similar in terms of speed and track quality to the Scheme. Details of those measurements are provided in Section D5.5.2 of Annex D of the Environmental Statement Volume 4 (CD/1.18). The measurements have been used as the basis of the assessment. The results are summarised:

Measured and Predicted Vibration Levels From Trains on the Marylebone to
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Banbury Line			
Train Type	Vibration Level (Z-axis VDV m/s ^{1.75}) at stated distance from the track		
	5 m	8 m	13 m
Freight	0.15	0.07	0.05
Passenger (DMU)	0.16	0.02	0.04
Predicted Daytime VDV	0.58	0.14	0.15
Predicted night time VDV	0.39	0.12	0.11

- 4.8.30 The expected levels of ground vibration at all buildings adjacent to the Scheme are below the assessment criteria in BS 6472 which relate to the structural integrity of buildings. Consequently, no impacts on buildings located adjacent to the Scheme are likely to occur.

Noise and Vibration Mitigation Policy

- 4.8.31 The final version of the Noise and Vibration Mitigation Policy ("the Policy") is set out in document CD/1.29/2. It is intended to apply to noise sensitive receptors along the route. The purpose of the Policy is to set out Chiltern's commitments to mitigating noise and vibration effects arising from operation of the railway. Those commitments include, in respect of noise:
- a) The residual noise effects at any location shall be no worse than those reported in the Environmental Statement (para 1.7).
 - b) Noise mitigation measures in accordance with the Policy would be installed before the need for them arises (para 1.10).
 - c) Use of the Best Practicable Means (as defined in section 72 of the Control of Pollution Act 1974) to design the railway so as to avoid significant noise and vibration impacts at existing sensitive receptors (such as residential properties, educational buildings and places of worship); and (if necessary, effective and reasonably practicable to install) to also provide noise barriers to mitigate noise between the track and sensitive receptors; and to offer noise insulation to properties where residual noise impacts on sensitive receptors remains high (para 2.2).
 - d) Where train noise is predicted to exceed either of the NEC level A noise threshold levels (paragraph 4.8.12 of this report) but to be less than the Noise Insulation Regulation threshold for noise insulation (paragraph 4.8.14 of this report), then Chiltern would provide mitigation measures to reduce the adverse effect of noise. The choice of measures would be exercised in the following way (para 2.4):
 - i) Exceedences of 3 dB or greater and increases of 3 dB or greater – mitigation at source through rail

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- infrastructure solutions would be implemented where reasonably practicable;
- ii) Exceedences of greater than 5 dB and up to 7 dB and increases of greater than 5 dB and up to 7 dB – mitigation at source and/or in the form of noise barriers if reasonably practicable and have no other negative effects;
 - iii) Exceedences of greater than 7 dB and increases of greater than 7 dB – mitigation at source through rail infrastructure solutions and where these cannot be reasonably practicably achieved, noise barriers would be provided where reasonably practicable.
- e) If, after consideration of the effects of noise mitigation measures at source, any of the Noise Insulation Regulation thresholds for noise insulation is still exceeded, then noise insulation to relevant properties would be offered, providing the corresponding existing or ambient noise level is routinely exceeded by at least 1 dB (para 2.5).
 - f) If the maximum by-pass free-field noise (L_{Amax} , the instantaneous “peak” as the train passes) regularly exceeds 82 dB (free-field) at night then additional noise attenuation measures would be taken, to include the offer of noise insulation to affected properties. One or two events per night would not be interpreted as “regular”, but the eight freight movements per night expected to follow Phase 2B are considered to be regular (para 2.7).
 - g) Station announcements would be made in such a way as to minimise the impact on nearby properties (para 2.14). Train motors would be shut down when not needed (para 2.15). Train horn noise would be reduced (para 2.16).
- 4.8.32 The need for vibration mitigation would be assessed from consideration of the Vibration Dose Value. Trackforms would be designed and installed adjacent to occupied vibration sensitive receptor buildings using Best Practicable Means to keep within these thresholds (para 2.8):
- Day (0700-2300 hrs): $0.4 \text{ m/s}^{1.75}$; and
 - Night (2300-0700 hrs): $0.2 \text{ m/s}^{1.75}$.
- 4.8.33 Where existing vibration levels are already above either of these thresholds, mitigation will be considered where the change in VDV is 50% or more as a result of the Phase 1, Phase 2A and Phase 2B works (para 2.10).
- 4.8.34 The Policy also sets out arrangements that Chiltern would follow for the noise and vibration monitoring and maintenance of the railway. The results will ensure that the performance of mitigation measures is as predicted by the design contractor and, if defects are identified, these will be corrected in a timely manner (Para 2.11).

The Mitigation Of Operational Noise Impacts

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- 4.8.35 Operational noise impacts have been considered for the combined Phase 1 and Phase 2A. An assessment has been carried out of the likely eligibility of properties under the Noise Insulation (Railways and Other Guided Transport Systems) Regulations 1996. Throughout the Scheme there are approximately six properties where insulation would be triggered under the Regulations. It is likely that these would be at Whimbrel Close, Bicester (where some three properties would be eligible), and the level crossing houses at Langford Lane, Oddington Crossing and Mill Lane, Islip. The assessment done so far can only give an indication of properties which may be eligible, and further detailed assessment would be carried out when determining eligibility under the Regulations.
- 4.8.36 Further, non-statutory, noise mitigation is also proposed, and further work would be undertaken during the preparation of the detailed design to refine mitigation measures for operational noise. Approximate locations of noise barriers are shown in the Environmental Statement (Volume 3, Figures 6.1A to 6.1Q) (CD/1.17); such barriers would typically be set two metres from the track and rise to two metres above the level of the rail. Noise modelling work was ongoing during the Inquiry and document CRCL/INQ/32 includes at Table 3 a summary of further noise modelling results sent to objectors. This sets out the existing noise baseline, the effect that operation of the Scheme would have if there were no noise mitigation, and the residual, mitigated, effects by day and by night at each of 53 properties occupied by objectors concerned about noise. Three of those properties are at Quadrangle House, and Chiltern's response to objections from Quadrangle House appears elsewhere in this report. Of the other 50 objectors' properties, none would have any residual noise impact during the daytime. At night, three would experience a noise increase of 1 dB and two an increase of 3 dB; elsewhere there would be no change at night.

Operational Vibration Impacts

- 4.8.37 The Vibration Dose Values arising from the Scheme are not expected to exceed the assessment criteria beyond approximately 10 metres from the tracks. Receptors that are close to or within this distance from the tracks include Quadrangle House, Kareol (the level crossing cottage in Mill Lane, Islip), Oddington Crossing house, 53 London Road Bicester, and the closest properties to the railway in Whimbrel Close, Bicester.
- 4.8.38 Vibration would be reduced by using intrinsically low-vibration track designs that provide continuous support to the train wheels. If necessary, resilient rail fixings, under-ballast matting, and sleepers mounted on resilient material or isolation below a concrete track bed would be employed. In the unexpected situations where vibration mitigation does not prove practicable, the vibration levels at the closest receptors are likely to be similar to those tabulated in paragraph 4.8.29 of this report, at which levels "adverse comments" are "possible" according to BS 6472, and that is not likely to be a significant effect. Significant effects are not expected to occur, given that vibration would be transient and at low levels.
- 4.8.39 Practicable options for vibration isolation are available and there will be

no residual impact from train vibration in terms of disturbance to building occupants. The existing railway was created over 100 years ago and has been operational since that time. Experience in the UK, EU, Asia, USA, Australia and New Zealand shows that there are no damage issues relating to vibration affecting housing alongside railways. Therefore building damage is not expected from the Scheme.

4.9 **Terrestrial Ecology**

Habitats Regulations Assessment

- 4.9.1 The Scheme has the potential to result in likely significant effects on the Oxfordshire Meadows Special Area of Conservation (SAC), which is protected under the Conservation of Habitats and Species Regulations 2010 ("the 2010 Regulations").
- 4.9.2 Guidance relating to the application of the Habitats Regulations to any assessment of a new project or plan's effect on a Natura 2000 site suggests that such an assessment should be carried out in four stages. The first two of these are concerned with establishing, first, the significance of any effect and then whether any such effect could have an adverse effect on the integrity of the site of conservation interest. Subsequent stages relate to alternative solutions and matters of public interest, which are not required to be invoked here.
- 4.9.3 Oxford Meadows Special Area of Conservation ("the SAC") covers 265.89 hectares and part of its eastern boundary is contiguous with the Scheme. Its location and extent are shown by Figure 1 of document CRCL/INQ/74. The SAC is designated primarily for supporting Annex I lowland hay meadow habitat and also because it supports the Annex II species *Apium repens* (creeping marshwort). The part of the SAC designated as including Annex 1 lowland hay meadows habitats is shown on Figure 1 and includes the Wolvercote Meadows SSSI, on the eastern side of the A34 trunk road, the Pixey and Yarnton Meads SSSI, on the opposite side of the A34 and at least 1 km from the Scheme, and other meadows (Cassington Meadows SSSI) to the west. The part of the SAC where creeping marshwort has been confirmed, or contains habitat suitable for this species to occur, is also shown on Figure 1 and lies on Port Meadow at least some 200 metres to the west of the proposed new railway.
- 4.9.4 The SAC is entirely made up of bodies of land which are individually designated as sites of special scientific interest (SSSIs). The citations for the following constituent SSSIs, which together cover those parts of the SAC nearest to the Scheme or to the A34 road are presented in Appendix 2 of document CRCL/P/10/B:
 - a) Port Meadow with Wolvercote Common and Green SSSI, described in its citation as a classic site for studying the effects of grazing on plant communities, having been grazed continuously for over a millennium.
 - b) Wolvercote Meadows SSSI, described in its citation as neutral grassland managed traditionally for hay and pasture.
 - c) Pixey and Yarnton Meads SSSI, described in its citation as meadows which have been cut annually for hay and the aftermath grazed for well over a thousand years.

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- 4.9.5 The Joint Nature Conservation Committee describes the SAC as representing lowland hay meadows in the Thames Valley, with unique vegetation communities reflecting the influence of long-term grazing and hay cutting (for several centuries). The site exhibits good conservation of structure and function. Port Meadow is the larger of only two known sites in the UK for creeping marshwort, which is listed on Annexes II and IV of the EC Habitats Directive because of its scarcity and decline in Europe.
- 4.9.6 The site depends on groundwater levels and annual flooding and on traditional hay-cutting and grazing. Port Meadow is registered common land with common grazing rights. Stocking levels are high and grazing takes place throughout the year and creeping marshwort is certainly tolerant of, if not dependent upon, this management regime.
- 4.9.7 In considering the effects of the Scheme on ecology, including where appropriate the SAC, Chiltern had, for example:
- Consulted Natural England, the Environment Agency, the Berkshire Buckinghamshire and Oxfordshire Wildlife Trust and others listed in the Environmental Statement;
 - Undertaken a desk study, collating information from local record holders, the Multi-Agency Government Information Centre and Natural England;
 - Undertaken extended Phase I habitat surveys, a Phase II survey within habitats of plant species interest, bat surveys, great crested newt surveys, an otter survey, a water vole survey, a generic breeding bird survey, a badger survey, a reptile survey and an invertebrate survey – all using the methods stated in section 8.2.3 of Volume 2 of the Environmental Statement;
 - On the specialist matter of creeping marshwort, consulted an author of a relevant research report by English Nature (2006) (who is also a member of the Oxford Rare Plant Group) and other leading authorities;
 - In addition to the Environmental Statement, produced several stand-alone ecological documents which were published at the time of the Second Addendum to the Environmental Statement, following a spring swarming survey at Wolvercot Tunnel in April/May 2010 (CD/2.27), a separate survey using an Anabat bat detector (CD/2.28), a reptile mitigation plan (CD/2.26), and a report on wintering bird surveys undertaken over the winter of 2009/10 (CD/2.29). More recent work reported to the Inquiry include a summer bat survey at Wolvercot Tunnel and a Great Crested Newt survey report and draft mitigation plan (CRCL/P/10/B, appendices 5 and 6).
- 4.9.8 As part of the EIA, a Habitats Regulations Screening Assessment was undertaken (Annex F1 to the Environmental Statement, CD/1.18). This concluded that the potential impacts of the Scheme on the SAC could come from three main sources:
- Direct damage or disturbance during construction;
 - Air pollution (resulting in nutrient enrichment caused by the exhaust from trains or by smothering in dust during construction of the Scheme); and,
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- Hydrological change.
- 4.9.9 Dust, changes to the groundwater levels and water pollution can be controlled through the Code of Construction Practice and no significant adverse impacts are predicted from those sources.
- 4.9.10 **Air Pollution** is presently emitted by trains. The most significant impact from an increase in trains would be the additional concentrations of oxides of nitrogen (NOx). The SAC boundary is close to the railway at its southern end and so is predicted to experience the largest impact, and that would be some 13% of the relevant critical concentration, expressed as an annual average. The specific habitat of interest in the SAC (Port Meadow) is further from the railway and so the additional concentration there would be lower than the maximum impact, at 5-10% of the critical level.
- 4.9.11 The magnitudes of other air quality impacts were also quantified in the Environmental Statement, notably the additional concentrations of sulphur dioxide and the deposition rates of acidity and nutrient nitrogen. None of these was as great, expressed as a fraction of the critical level or critical load, as the increase in NOx concentrations and can be regarded as not significant.
- 4.9.12 But an increase in NOx concentrations arising from the Scheme of approximately 10% of the critical level cannot be described as “insignificant” and some consideration should be given to the effect, if any, on the site’s integrity, with regard to the conservation objectives of its designation. It is important to recognise that simply exceeding the percentage thresholds of the critical loads/levels does not automatically mean that there would be significant impacts on the habitats of the designated sites. The impacts on habitats and plant species from pollutants such as NOx and deposited nitrogen are difficult to predict. It is entirely possible that the emissions from the trains would not result in any adverse effects on the habitats in the designated sites.
- 4.9.13 The balance of nitrogen effects in grassland habitats is often complicated by the existing management regimes, including grazing and mowing. Grazing adds nitrogen to the habitat through urine and faeces from the livestock, and also removes it; as does mowing when the cut grass is taken off site. Livestock contributes the largest source of aerial nitrogen deposition to the Oxford Meadows SAC. In contrast, the current railway emissions account for a mere 3%, and road transport contributes 13%. It is likely that the extent of grazing varies considerably through the year, and hence the direct nitrogen input with it. It is therefore likely that the plant species presently on the SAC have become accustomed to this regime and to the current aerial nitrogen deposition attributable to road and rail traffic.
- 4.9.14 **Lowland Hay Meadow** – the neutral grassland communities recorded on the Oxford Meadows consist of the National Vegetation Classification communities MG11 and MG13, which are in favourable condition. Both communities are priority habitats in the UK Biodiversity Action Plan. Also present are communities MG5 (which shows signs of overgrazing) and MG6, a community of lesser biodiversity value and, on the Oxford Meadows, species poor and with an abundance of invasive species. The
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Scheme's impacts on the MG11 and MG13 communities are difficult to predict. However, as they are currently in favourable condition and ammonia from grazers is high in this area, the likely increase in air borne nitrogen is not predicted to have any material adverse effect on the MG11 and MG13 communities.

- 4.9.15 **Creeping Marshwort** is not known to be sensitive to high nitrogen levels. On the contrary, it has a preference for habitats that are nitrogen rich.
- 4.9.16 Therefore, the additional airborne concentrations of NO_x and the additional nitrogen deposition predicted to result from operation of the Scheme would not adversely affect the integrity or the qualifying interests in the Oxford Meadows SAC.
- 4.9.17 While the view of Chiltern's witness is as reported in paragraph 4.9.16, a precautionary approach was agreed with Natural England when the Environmental Statement was being prepared. That approach is described by the Environmental Statement (CD/1.16, section 8.6.2) as follows:
- It has been established in consultation with Natural England and the Centre for Ecology and Hydrology that it is very difficult to predict the level of impact on habitats of air pollutants such as NO_x and nitrogen deposition. Taking this into consideration, the HRA screening exercise has, taking the precautionary approach, identified the need for mitigation. It has been agreed with NE that this should take the form of a monitoring regime, including soil and vegetation sampling, [which] will be devised for those parts of the site agreed with NE to be at risk. Should the monitoring detect any changes in vegetation cover/composition on Oxford Meadows SAC, attributable to the Scheme, which if left unmanaged could result in an effect on the site integrity, appropriate measures will be devised (e.g. control/removal of unfavourable plant species from the designated site). The details of this arrangement will be agreed with NE and covered by a planning condition. This approach will avoid adverse effects on the integrity of the Oxford Meadows SAC.*
- 4.9.18 Since then, substantial practical difficulties associated with implementing such a strategy have come to light. Implementation would require agreement to be reached with all parties with interests at Port Meadows but, given the multiplicity of interests there, this may not be possible.
- 4.9.19 Chiltern has considered in detail options for reducing emissions at source, but none is achievable as part of the Scheme. The frequency of trains cannot be reduced, since that would prejudice the viability of the Scheme. There is no plan to electrify the line, although the Scheme allows for electrification in future. There are no catalytic convertors that can be retrospectively fitted to trains. But the Scheme would have a lifetime measured in decades and it is very reasonable to suppose that emissions of nitrogen oxides from trains using the line, and from other sources in the area, would become much lower than they are today.
- 4.9.20 **Direct Damage/Disturbance** – the Scheme proposal has been modified to extend into the SAC only so far as is necessary to raise the bridleway that leads onto Port Meadow from the Aristotle Lane bridge

over the railway. The bridleway could be raised within the footprint of the existing bare earth path, thereby avoiding the permanent loss of habitat from within the Oxford Meadows SAC envisaged when the Environmental Statement was prepared. There would be a need for a temporary works site extending to some 140 square metres, which would be located immediately north of the section of bridleway to be raised, as that is the least ecologically sensitive option. The existing habitat there would be protected by geotextile or similar during the two-month construction period. A planning condition is proposed to ensure that a method statement for this work is approved by the local planning authority and Natural England, and subsequently complied with.

- 4.9.21 Direct damage and disturbance to the site would not affect the integrity of the SAC.

Wendlebury Meads and Mansmoor Closes SSSI

- 4.9.22 This SSSI abuts the railway. It extends to 73.2 hectares and is designated for unimproved neutral meadows, calcareous grassland and wet grassland habitats. In August 2010 Natural England reported the site to be in favourable condition.
- 4.9.23 The Scheme would affect the SSSI by installing, as part of the revised access arrangements around Holts Farm (paragraph 4.5.15 of this report refers), a hardened access track along the edge of the SSSI from Beebont Crossing to Home Farm crossing. This would result in the permanent loss of approximately 675 square metres of the SSSI. Proposed mitigation for this loss of SSSI habitat includes creating approximately 1450 square metres of lowland hay meadow on land in the SSSI which is currently under an existing farm building and hardstanding. The farm building would be relocated nearby but out of the SSSI and the site seeded with plant species found in the SSSI and turves would also be used there from areas lost to the hardened track in the SSSI. The works would be carried out in accordance with a method statement agreed with the local planning authority. There would be no significant impact on the SSSI.
- 4.9.24 The effect on the SSSI of air quality changes associated with the Scheme has been considered. Current NO_x concentrations and nitrogen deposition rates in the vicinity of the SSSI are influenced by livestock, by the current use of the railway, and by traffic on the nearby M40 motorway. The additional nitrogen concentration at the most affected part of the site would be 11.5 µg per cubic metre. The additional nitrogen deposition rate would be relatively small in comparison with the critical load for this habitat, and the total deposition rate for nitrogen (including the background) would be 25 kilograms per hectare per year, which is in the middle of the estimated range for the critical load of 20 to 30 kg/ha/year.

Hook Meadows and Trap Grounds SSSI

- 4.9.25 This SSSI abuts the railway and extends to 11.3 hectares. It is designated as a series of unimproved neutral meadows containing a wide range of species associated with grasslands. The site is divided into two units for management purposes. Unit 1 is considered by Natural England (August 2010) to be in unfavourable condition (no change) and Unit 2 is

considered to be in unfavourable condition (recovering).

- 4.9.26 The Scheme would increase NO_x concentrations at the most-affected part of the site by 8 µg per cubic metre and the contribution there to nitrogen deposition rates would be 1 kg/ha/year. Considering the site as a whole, the additional concentrations and deposition rates would be much lower. Even at the stated deposition rate, the total deposition rate for nitrogen at the site would be 22.5 kg/ha/year, near the lower end of the range given for the critical load for this habitat of 20-30 kg/ha/year. The areas of favourable habitat, located to the north west of the site, are not immediately adjacent to the railway corridor and so the concentrations of NO_x and nitrogen would be at levels not predicted to influence the communities on the site.
- 4.9.27 There would be no land take from this SSSI. Construction activities undertaken within 500 metres of the SSSI would be undertaken only in accordance with a method statement that had been approved by the local planning authority. A buffer would be maintained between the construction works and the site, and best work practices would be followed to avoid pollution incidents and ground water contamination.
- 4.9.28 It is therefore predicted that there would be no significant adverse effect on the integrity of the SSSI.

Non Statutory Wildlife Sites

- 4.9.29 The former Wendlebury Ponds County wildlife site, identified in the Environmental Statement, has been de-designated.
- 4.9.30 The Environmental Statement indicates that some 1.8 hectares of the Gavray Meadows County wildlife site (some 12% of that site) would be lost to accommodate the Bicester Chord, but that figure was changed during the Inquiry to a net loss of 2054 square metres, for the reasons given in paragraph 8.11.23 of this report. This loss would be offset by enhancing an area of the existing County wildlife site immediately to the east of Charbridge Lane, and which is to be acquired to provide replacement open space. This proposal had been issued before the Inquiry to Berkshire, Buckinghamshire and Oxford Wildlife Trust for consultation. If seen through, the proposal would maintain and enhance the existing habitats and create additional habitat for amphibians and reptiles, and create a new breeding pond to encourage amphibians including great crested newts.

Protected Species: Bats

- 4.9.31 In accordance with the *English Nature Bat Mitigation Guidelines*, all buildings, bridges, tunnels, tree-lines and areas of woodland located within the Scheme and in close proximity were assessed for their potential to hold bat roosts, and for their foraging and commuting potential. All features that were assessed as having medium or high potential for either roosting bats or foraging and commuting bats were then subject to a bat roost survey or an activity survey. The only bat roosts that were recorded during the surveys were at Wolvercot Tunnel ("the Tunnel"). Winter hibernation surveys confirmed the use of the Tunnel as a hibernation roost and helped inform the draft bat mitigation plan published as part of the first Environmental Statement Addendum

(CD/1.22). Further surveys in spring and summer 2009 found no spring swarming activity and no evidence of the tunnel being used as a maternity roost site. Surveys in autumn 2009 suggested that small numbers of swarming bats were present at the Tunnel, that bats commute through the tunnel and forage within it and along the railway corridor, and that a small number of common and soprano pipistrelles use the Tunnel as a lekking site (one used by males to call females to their harem (a temporary roost site)). The railway corridor is important for bats.

- 4.9.32 When the Inquiry opened, a bat mitigation plan was being developed in consultation with Natural England. Their views, and Chiltern's response, are set out later in this report.

Protected Species: Great Crested Newts

- 4.9.33 The Scheme would remove two water bodies, each of which contains a low-medium great crested newt population. The water bodies in question are a ditch which runs along the side of the railway embankment west of the Water Eaton crossing, and a pond south-west of Islip. There would also be some loss of great crested newt terrestrial habitat. Following consultation with Natural England, a Draft Great Crested Newt Mitigation Plan was produced (CRCL/P/10/B appendix 6) and issued to Natural England for comment.
- 4.9.34 A great crested newt disturbance licence will be obtained for the works, and the mitigation measures details in the Draft Great Crested Newt Mitigation Plan will be used as the basis for the licence application. Mitigation for the loss of the water bodies would include the creation of two water bodies for each one lost, within 250 metres of the bodies that would be lost, and the enhancement of habitat.

Protected Species: Reptiles

- 4.9.35 Surveys in September 2009 confirmed the presence of reptiles (slow worm and grass snake) at Oxford station, Wolvercot Tunnel South, Wolvercote Tunnel North, and Langford Industrial Estate South.
- 4.9.36 A mitigation plan (CD/2.26) has been agreed with Natural England. Existing reptile habitats in the Scheme corridor would be enhanced, new reptile habitats created, and there would be localised relocation of reptiles away from harm, either to another location nearby or, if that is not possible, to land which would be acquired in the Gavray Meadows County wildlife site as replacement open space.

Protected Species: Badger

- 4.9.37 Setts have been identified that would be affected by the Scheme. A mitigation plan for badgers is being prepared in consultation with Natural England. Chiltern expects that an interference licence will be approved by Natural England. Construction and operational impacts are not expected to harm the local badger population.
- 4.9.38 The artificial setts that would be provided would be located so as to reduce the risk of badgers being struck by trains.

Protected Species: General

- 4.9.39 Chiltern is following the processes described in the preceding paragraphs

in order to secure the necessary Protected Species Licences, including agreeing mitigation plans with Natural England. Licence applications would be made in good time, so that Natural England could consider them and any points could be resolved so that the Licences could be granted concurrently with the Order.

4.10 **Land and Property**

General

4.10.1 Chiltern has sought to minimise the construction impacts on affected landowners and properties. Temporary possession of land or interests in land will only be taken if they are necessary for the construction of the Scheme. Where it is not necessary to acquire a freehold interest in the whole of a property, Chiltern's acquisition will be limited to rights and interests in land, airspace or subsoil.

4.10.2 Appendix 2 of document CRCL/P/11/B identifies, among other things, the interests that Chiltern seeks to acquire in special category land. With regard to open space, a permanent interest is sought in the following parcels:

01004, 01011, 02003, 02007, 03002, 03005, 03023;

and temporary interests are sought in these parcels of open space land:

01010, 02004, 02008, 03003, 03014, 03020, 03022, 29009, 29010, 29011, 29012, 29018, 30009.

Statement of Matters

4.10.3 Matter 6(c) refers to the effects on users of the rights of way network of the proposed permanent closure of crossings of the Bicester to Oxford railway. Chiltern has fully assessed the impact that the closure of private crossings would have on those who rely on the crossings. In most cases a bridge would be provided instead, but in some cases the need for a bridge has not been deemed essential to provide an alternative means of access. In these cases, alternative access routes are to be provided. Chiltern is satisfied it has assessed the current use of the accommodation crossing and the need for an alternative. The provisions of the compensation code will compensate for any financial losses or disturbance caused by the closure of private accommodation crossings.

4.10.4 Matter 14 refers to the case for conferring compulsory purchase powers. All of the evidence brought by Chiltern, and the totality of the Chiltern case for the Scheme, demonstrates that there is a compelling case for the Scheme. Compulsory acquisition and use of all of the land and property permanently and temporarily required for the Scheme, is in the public interest. The necessary land for the Scheme could not be assembled without the exercise of compulsory purchase powers.

4.10.5 Document CRCL/INQ/3/1 was produced at the end of the Inquiry. It provides references to those elements of Chiltern's evidence that relate to each item in the Statement of Matters.

4.11 **Planning and Environment**

Statutory Policy Framework

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- 4.11.1 The statutory development plan for Cherwell District comprises saved policies of the adopted Cherwell Local Plan 1996 (CRCL/INQ/40, CRCL/INQ/82) and that for Oxford City comprises saved policies of the adopted Oxford Local Plan 2005 (CD/4.3, CRCL/INQ/82).
- 4.11.2 Work on updating the Cherwell Local Plan was discontinued in December 2004 in order to progress the new Local Development Framework. However, the non-Statutory Cherwell Local Plan was approved as interim planning policy for development control purposes. The Cherwell Draft Core Strategy (CD/4.12) was subject to public consultation from February to April 2010.
- 4.11.3 The *Oxford Core Strategy 2026 Proposed Submission* (CD/4.9) was updated by *Proposed Changes To The Submission Core Strategy, April 2009* which added more detail but did not make any fundamental changes to the original strategy. This was considered at the Examination in Public held in July and September 2009. The Inspectors' Report was due to be published in October 2009 but was put on hold in the light of legal challenges made to the South East Plan and consequent uncertainty over the Strategic Development Area to the south of the city. The EIP reconvened in September 2010 (Obj123/2) to consider *Further Proposed Changes To The Submission Core Strategy, April 2010* (CD/4.16) which had been the subject of public consultation in April and May 2010, and which contains an update on housing and employment growth forecasts. Oxford City Council proposes no further changes to the Core Strategy.

Relevant Planning and Environmental Policy

- 4.11.4 Transport policy support for the Scheme is described elsewhere in this report (4.7.11). Document CRCL/INQ/43 brings together relevant national, regional and local planning and transport policies.
- 4.11.5 The following national planning policy considerations are relevant:
- a) PPS5 *Planning for the Historic Environment* (CD/3.29): The scheme would pass close to two Scheduled Monuments – Alchester Roman Town and Rewley Abbey Stream Swing Bridge. Setting studies of both have been undertaken and shared with English Heritage. The studies conclude that there would be only minor harm to the setting of the Roman Town and none to that of the Swing Bridge. At the Swing Bridge, an opportunity has been identified to enhance or better reveal the significance of the heritage asset (PPS5 Policy HE 10.2) and a condition is proposed to secure that.
 - b) PPS7 *Sustainable Development In Rural Areas* (CD/3.11) seeks to ensure that the quality and character of the wider countryside is protected and where possible enhanced. The conclusion of the Landscape and Visual Impact Assessment in Chapter 7 of the Environmental Statement is that the Scheme's impact on landscape character would generally be minor and that in some areas landscape character would be improved. The policy objective would be met. PPS7 also seeks to protect the best and most versatile agricultural land. Some 15.19 hectares of such land would be permanently taken for the Scheme, but this is unavoidable.

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- c) i) PPS9 *Biodiversity and Geological Conservation* (CD/3.15) recognises the various protection levels afforded to sites such as Special Areas of Conservation (SACs), Sites of Special Scientific Interest (SSSIs), locally designated sites of biodiversity interest, and protected habitats and species. In the case of SACs, the relevant procedures for an appropriate assessment where there may be an adverse effect on the integrity of the site are set out in *The Conservation of Habitats and Species Regulations 2010* (CD/5.30). In the case of SSSIs, there is a presumption against development likely to have an adverse effect unless the benefits at the site clearly outweigh both the likely impacts on the special features of the site and any broader impacts on the national network of SSSIs.
- ii) The Scheme potentially affects the Oxford Meadows SAC and a number of SSSIs, described in Chapter 8 of the Environmental Statement (CD/1.16) and elsewhere in this report (4.9.1, 4.9.22, 4.9.25). PPS9's intention that planning decisions should conserve and enhance biological and ecological diversity is amplified in the joint DEFRA and ODPM Circular 06/2005 *Biodiversity And Geological Conservation – Statutory Obligations And Their Impact Within The Planning System* (CD/5.20). Development that would significantly harm biodiversity interests should be allowed only when:
- o The development cannot reasonably be located on alternative sites that would result in a lesser impact;
 - o Adequate mitigation measures are secured; and,
 - o Appropriate compensation measures are sought if the impact cannot be mitigated.
- iii) For the reasons set out in section 4.9 of this report, it is clear that the Scheme proposals meet the specific tests in relation to the materiality of impacts on the SAC and SSSIs contained within the Regulations and PPS9.
- iv) PPS9 and the Circular also summarise the statutory protection afforded to European Protected Species. Of those, bats and Great Crested Newts are potentially affected by the Scheme (as reported in paragraphs 4.9.31 to 4.9.34 of this report). The Scheme is capable of meeting the statutory tests for the grant of the requisite licences and of delivering adequate mitigation to ensure that there are no predicted long term significant adverse effects on European Protected Species, and the policy tests in PPS9 in respect of these are met.
- d) PPG17 *Planning For Open Space, Sport and Recreation* (CD/3.8) requires the benefits being offered to the community by a development proposal to be weighed against the loss of open space that would occur. A large enough area of replacement open space would be provided and so the Scheme would comply with the objectives of open space policy to maintain levels of public provision and enjoyment of open
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- space.
- e) PPS23 *Planning and Pollution Control* (CD/3.12) requires that consideration is given to the risks of and from land contamination, and that unacceptable risks should be addressed. The Scheme would not present any “unacceptable risks”, and necessary mitigation and management measures would be put in place through a planning condition to ensure compliance with PPS23.
 - f) PPG24 *Planning and Noise* (CD/3.4) recognises that noise mitigation measures should be proportionate and reasonable, that much of the development which is necessary for the construction and improvement of essential infrastructure will generate noise, and that there will be circumstances when it is acceptable – or even desirable – to allow noise-generating activities on land near or adjoining a noise sensitive development. The Scheme would provide essential infrastructure and would include stringent noise performance requirements and provide location-specific mitigation measures, where practicable, in addition to the Scheme’s design and operational procedures. The Scheme would meet policy requirements for proportionate and reasonable mitigation.
 - g) PPS25 *Development And Flood Risk* (CD/3.30) – Flood Risk Assessment Technical Reports have been produced (CD/2.22) and further work is to be undertaken. Protective provisions in the draft Order and planning conditions are proposed to ensure that the Scheme would be constructed and operated in accordance with PPS25 and will deliver responsible flood risk management.
- 4.11.6 As to local policy, the adopted Cherwell Local Plan 1996 includes policies relating to Scheduled Monuments, nature conservation, protected species, the River Cherwell flood plain, landscape character, the open countryside, environmental pollution, water quality, flooding and contamination, and similar topic areas are covered by the Non-Statutory Cherwell Local Plan. Policies in the Adopted Oxford Local Plan deal with Scheduled Monuments, features of ecological and geological importance, surface water and the need for Flood Risk Assessments. The Scheme is consistent with all of these.
- 4.11.7 Economic development policy and the Scheme complement one another. By contributing to social progress, protecting the environment, making prudent use of natural resources and contributing to sustainable growth and employment the Scheme would serve objectives of PPS1 *Delivering Sustainable Development* (CD/3.13). Annex A of the *Eco-Towns Planning Policy Statement* (CD/3.22) identified North-West Bicester as a potential Eco-Town location, a position confirmed by the Department of Communities and Local Government’s *Location Decision Statement on Eco-Towns* (CD/3.20) which confirmed North West Bicester as a suitable location and noted that the Scheme would bring beneficial transport investment. The Cherwell Draft Core Strategy (CD/4.12) includes an allocation for the Eco-Development and requires at least half the trips
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made from it to be by means other than the car. PPS4 Planning for Sustainable Economic Growth (CD/3.24) recognises the importance of sustainable transport. The South East Plan (CD/4.11) identifies Oxford as a Regional Hub, to be supported by new multi-modal transport infrastructure, and as an anchor of the "Oxford-Cambridge Knowledge Arc" which the East West Rail project would serve. The Further Proposed Changes to the Oxford Submission Core Strategy provides for the development of strategic sites such as Northern Gateway, where 55,000 square metres of B1 office development is envisaged, as part of the provision of 11,000 to 14,000 jobs by 2026 and 8,000 dwellings.

4.11.8 Adopted and saved local plan policies were before the Inquiry. Those dealing with noise or vibration include:

a) The Adopted Oxford Local Plan 2001-2016 (CD/4.3):

Policy CP.19 – Nuisance: Planning permission will be refused for development proposals that cause unacceptable nuisance. Where such nuisance is controllable, appropriate planning conditions will be imposed. Planning permission will not be granted for residential development where the future occupiers would be likely to suffer from substantial nuisance from noise, dust, fumes, vibration, light or proximity to hazardous materials, unless adequate protective measures can be implemented before the development is occupied.

Policy CP.21 – Noise: Planning permission will be refused for developments which will cause unacceptable noise. Particular attention will be given to noise levels (a) close to noise-sensitive developments; and (b) in public and private amenity spaces, both indoor and outdoor. The City Council will impose easily enforceable conditions to control the location, design, layout and operation of development proposals to minimise any adverse impact as a result of noise and its transmission. Proposals for noise-sensitive developments should have regard to (c) the existing sources of noise, e.g. from roads, railways and other forms of transport; industrial and commercial developments; sporting, recreation and leisure facilities; (d) internally generated noise or associated externally generated noise; and (e) the need for appropriate sound insulation measures.

Appendix 2 of CD/4.9 "Oxford Core Strategy 2026 Proposed Submission" lists policies in the Oxford Local Plan 2001-2016 that would be replaced by Core Strategy policies. The list does not include policy CP.19 or policy CP.21.

(b) The Cherwell Local Plan, adopted 6 November 1996 (CRCL/INQ/40):

Policy ENV1: Development which is likely to cause materially detrimental levels of noise, vibration, smell, smoke, fumes or other type of environmental pollution will not normally be permitted.

4.11.9 The Oxford Core Strategy 2026 Proposed Submission (CD/4.9) expresses support for East West Rail and improvements to the Bicester line, and increasing the capacity and function of Oxford station.

Environmental Impact Assessment

4.11.10 The Environmental Statement is a robust and transparent assessment

which properly addresses the requirements of the EIA Directive and the Rules. It identifies clearly the potential impacts, any necessary mitigation measures and any significant adverse residual environmental effects once mitigation is in place.

- 4.11.11 The Environmental Statement and ES Addenda were publicised in accordance with the relevant procedures, and all statutory requirements in relation to consultation have been fully complied with.
- 4.11.12 Section 2.5 and Annex C of the Environmental Statement describe the appraisal process that was used to examine alternatives.
- 4.11.13 The Environmental Statement has been prepared and submitted in accordance with the requirements of the Transport and Works Act 1992. An Addendum to the Environmental Statement (CD/1.22) was published on 8 April 2010. It reports the results of hibernation surveys for bats in Wolvercot Tunnel and set out a draft Bat Mitigation Plan for consultation. The Second Addendum to the Environmental Statement (CD/1.22/1) dealing with the revised Langford Lane alignment was published on 9 September 2010. Further ecological, archaeological and other survey work took place since the submission of the ES. The results have been used to improve the design of mitigation measures and in many cases have been included as Inquiry documents so that they are available to the public.

Scheme Design, Planning and Implementation

- 4.11.14 Rule 10(6) of the Application Rules provides for a request to be made to the Secretary of State for a direction that planning permission be deemed to be granted for the development provided for in the Order under section 90(2A) of the Town and Country Planning Act 1990. A set of Planning Direction Drawings showing the works for which a direction of deemed planning permission is sought accompanies the Order application as required by Rule 10(6)(d) of the Application Rules.

Code Of Construction Practice

- 4.11.15 The purpose of the Code of Construction Practice would be to protect the environment, amenity and safety of local residents, businesses and the general public while the works are being carried out. The current Draft Code of Construction Practice (CD/1.24) covers specific legislative requirements, compliance with current standards and other general requirements. It also provides for those mitigation measures identified in the Environmental Statement and not secured by other means. It is the subject of a suggested planning condition which would require the submission of a Code of Construction Practice for approval by the local planning authorities and which would require the works to be carried out in accordance with the approved Code.
- 4.11.16 The Code of Construction Practice Revision Two Draft includes an introduction and the following chapters:
- Public Information And Complaints
Liaison Officer – website – newsletter – complaints hotline – complaints log – staff identification.
 - Hours Of Working

- Site Arrangements

Site housekeeping – fencing and hoarding – lighting and visual intrusion – access and loading – security – living accommodation – clearance of site upon completion – pest control – safety – protection of existing buildings and installations.

- Traffic And Transport

Overview – General measures to reduce construction traffic impacts – alternative routes for public and private access to be maintained.

- Noise And Vibration

Noise control – Vibration.

- Dust And Air Pollution

- Disposal Of Waste And Contaminated Materials

Waste – contaminated land and materials.

- Protection Of The Water Environment

Overview – pollution prevention and control – abstractions and discharges – modifications to natural drainage conditions – works in the vicinity of water – watercourse crossings and riparian/bankside works – culvert works – specialist works – mitigation of flood risk – ecological water environment sensitivities – emergency and unforeseen events.

- Ecology

Encroachment into wildlife areas – disturbance and damage to habitats – designated sites – protected species – protection of mature trees – tree replacement – control of invasive and alien species.

- Archaeology And Cultural Heritage

Archaeological deposits – historic buildings and structures – the historic landscape.

- Landscape And Visual.

- 4.11.17 The provision for the protection of existing buildings and installations is set out in section 4.10 of the draft. Among other things, it requires that structural damage assessments shall be undertaken of all buildings that are within the zone of influence of the works and which may be at risk of damage from ground movement or vibration caused by the works. The list of such properties would be subject to the agreement of Chiltern. A firm of chartered surveyors or engineers would be appointed to undertake surveys of those buildings before and after the execution of the works.

Design And Access Statement

- 4.11.18 The Design and Access statement was revised during the Inquiry. The Revised Design and Access Statement is document CD/1.19/1. It is structured as follows:

- Introduction;
- An outline of Chiltern's approach to design, the consideration of

alternatives and the role of public consultation in the design process;

- Description and review of the design of the main built elements of the Scheme;
- Accessibility considerations for the whole Scheme and its components;
- Summary of the main design elements;
- Conclusions; and,
- Technical annexes.

4.11.19 The Design and Access Statement has been prepared in accordance with DCLG Circular 01/2006 *Guidance On Changes To The Development Control System* and with CABE best practice guidance *Design And Access Statements – How To Write, Read And Use Them*. It also identifies the following proposed measures for mitigating what might otherwise be adverse impacts of the Scheme:

- a) Landscape strategies for Tubbs Lane, Langford Lane, Mill Lane (Islip), and the Rewley Abbey Stream Swing Bridge.
- b) Noise mitigation measures which might be required.

Application For Scheduled Monument Consent

4.11.20 Consequent upon the proposed closure of Langford Lane level crossing, minor works would be needed to create two turning bays (or “turning heads”) in the Alchester Roman Site Scheduled Monument. Document CRCL/INQ/8/1 includes the grant on 3 November 2010, subject to conditions, of Scheduled Monument Consent for those works.

Green Belt And Conformity With PPG2

4.11.21 The Scheme would be in the Green Belt between (in the north) the northern side of its crossing by the M40 and (in the south) the boundary between Cherwell District and the City of Oxford (close to the northern end of Lakeside), a distance of about 10 kilometres. A short length of Work No. 2 to the south of chainage 17000 and the proposed alterations to the bridleway near Aristotle Lane would also be in the Green Belt.

4.11.22 PPG2 *Green Belts* (CD/3.5) contains a general presumption against inappropriate development in the Green Belt. Such development is by definition harmful to the Green Belt. Great importance is placed on protecting the Green Belt and substantial weight will be attached in planning decisions to any harm to the Green Belt. The fundamental aim of Green Belt policy in PPG2 is to prevent urban sprawl by keeping land permanently open. The most important attribute of Green Belts is their openness.

4.11.23 ODPM Circular 11/2005 *The Town And Country Planning (Green Belt) Direction 2005* (CD/5.31) is clear that a consideration is “whether the development would significantly impact on the openness of the Green Belt”, and goes on to list the considerations to be taken into account when assessing the significance of the impact on openness, which are:

- The degree of sensitivity of the land to harm from new development;
- Proximity to residential development;

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- The scale of development;
 - The nature of the development, in particular whether it involves intensive on-site activity; and,
 - The extent to which the impact of the development would be reduced or mitigated by siting, landscaping or planting.
- 4.11.24 Policy GB1 of the adopted Cherwell Local Plan proposes restrictions of development in the Green Belt and seeks to protect the visual amenity of the Green Belt; and Policy GB1 of the Non-Statutory Cherwell Local Plan replicates that approach.
- 4.11.25 The impact of the Scheme on the Green Belt is assessed as follows:
- a) Track dualling and new bridges: Most of the track work would be in the existing rail corridor which already passes through the Green Belt, and would not impact on the openness or purposes of the Green Belt. Several new bridges would be built, and their locations are necessarily tied to the track alignment. The approach ramps to the bridges would be planted with shrubs and hedges and over time only the bridge spans, parapets and abutments would be distinguishable in longer views. The Landscape and Visual Impact Assessment (Chapter 7 of the Environmental Statement) finds that the bridges would have only a minor adverse impact on landscape character in the Green Belt, visible only from near the Scheme. The bridges would be visually separated. They would have no cumulative effect on the openness of the Green Belt.
 - b) Islip station in the Green Belt would be the site of new platforms and a connecting pedestrian path. These works would cause no material additional impact on the openness of the Green Belt or its purposes.
 - c) The rail aggregates depot at Water Eaton:
 - i) Such a facility has existed at Banbury Road for many years and was effectively authorised under the original private Railway Acts. It is identified by saved policy SD7 and safeguarded by saved policy SD9, both of the Oxfordshire Minerals and Waste Plan 1996. Much of its site is needed for the proposed rail infrastructure and for Water Eaton Parkway Station. It is reasonable that the Scheme should relocate this safeguarded facility at Water Eaton to ensure continued operation.
 - ii) Seven alternative locations were considered for the new rail aggregates depot. The appraisal report was before the Inquiry as Appendix 6 of document CRCL/P/12/B. The Scheme proposal is preferred because it allows for effective operation of the depot, needs only minimal additional rail infrastructure, had good road access, could have dedicated lorry access, and minimises impacts on nearby communities and the environment.
 - iii) The selected site is therefore the best available. And no other site, outside the Green Belt, could meet the need for a
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rail to road aggregates terminal to serve the Oxford area. Although the site is undeveloped pasture land with some hedgerow, the depot with its proposed bunds and existing and proposed landscaping would have only a minor impact on the open character of the landscape. Planning conditions are proposed to require further approval of any buildings and plant, to secure the landscaping proposals and to limit the height of stored materials.

iv) Relocation of the depot would be inappropriate development with a minor adverse effect on the openness of the Green Belt. There is no likelihood that the depot would need to expand, or that it should attract other legitimate uses to the area. If there was no well-located and cost-effective terminal to serve Oxford, there could be greater pressure to allow sand and gravel extraction which could, depending on the location, be contrary to the purposes of the Green Belt. For these reasons, the relocated aggregates terminal can be justified in planning and Green Belt terms.

d) Water Eaton Parkway Station and the Park and Ride facility – The impact of this development on openness is assessed in the terms identified in ODPM Circular 11/2005 (4.11.23):

i) The sensitivity of the landscape to development – This is previously-developed land containing a large derelict grain silo. The sensitivity of the landscape to the proposed change is low, given its character and appearance. The new development would not be dominant in the landscape, and it would be screened by the existing neighbouring park and ride site, by existing planting and by the railway. The development of previously-developed land in the Green Belt is preferable to greenfield development in the Green Belt. The site is not a particularly attractive area of open countryside and, because of its distance from Oxford, is not important to the preservation of the setting and special character of Oxford.

ii) Proximity to residential development – the nearest residential area of Kidlington is over 500 metres away. Kidlington is physically and visually separated from the Scheme by the A34, a heavily trafficked dual carriageway. The site is enclosed by the railway line, major roads and the existing park and ride site.

iii) Scale of Development – Removal of the grain silo would benefit the local landscape and the openness of the Green Belt. The Scheme proposal would be much smaller and the Green Belt would benefit from the changed scale of development.

iv) Nature of development – PPG2 recognises that the activities associated with park and ride developments can be appropriate development in some circumstances, and that is considered in sub-paragraph e).

v) Mitigation by siting, landscaping or planting – Annex C of the Revised Design and Access Statement (CD/1.19/1) shows

an illustrative landscaping proposal. Such an approach, which is proposed to be secured by condition, would mitigate any potential visual intrusion of the Scheme on the openness of the surrounding Green Belt.

vi) Overall, the Scheme would cause no substantial harm to the Green Belt on account of the loss of openness at Water Eaton or loss of openness of the Green Belt taken as a whole.

- e) The PPG2 Tests for Park and Ride Facilities – Paragraph 3.17 of PPG2 identifies several tests which, if satisfied, mean that a park and ride development is not inappropriate development in the Green Belt. All the tests are met, and so the Park and Ride element of the Scheme is appropriate development in Green Belt terms:

Test 1: A thorough and comprehensive assessment of potential sites has been carried out: Appendix 7 of document CRCL/P/12/B presents the North Oxford Station Sites Appraisal Report. It is thorough and comprehensive and concludes that the Scheme site is the most sustainable option, that there are no suitable alternative sites outside the Green Belt (two were considered, adjacent to the Peartree park and ride site, but were dismissed on grounds of use of undeveloped land, proximity to a residential area, relative difficulty of access from Kidlington, limited connections with the existing bus network, traffic congestion at Peartree roundabout, construction difficulty due to topography, close proximity to a site of local importance to nature conservation), and that the Scheme site is the most operationally efficient site in the Green Belt and is alone in securing the redevelopment of a brownfield site and the demolition of a large dominant building in the Green Belt. Test 1 is met.

Test 2: The proposal should be the most sustainable option taking account of all relevant factors including travel impacts: The Scheme site is next to an already successful bus-based park and ride facility and would serve a greater population than the alternatives. It would allow for additional modal interchange and the combination of train and bus would provide a realistic alternative for local people to car trips. It would provide ample cycle parking, important to Oxford where cycling is unusually popular. It would help to tackle congestion on the heavily-trafficked Bicester to Oxford corridor and would greatly increase public transport capacity. Test 2 is met.

Test 3: The scheme would not seriously compromise the purposes of including land in Green Belts: The main changes would be located in an already-developed area between the existing park and ride site and the railway. A tall and dominant building would be removed. Test 3 is met.

Test 4: The scheme should be contained in the local transport plan and based on a thorough assessment of travel impacts: The scheme is contained in the local transport plan (4.7.12).

Detailed studies have been undertaken of the scheme's effects on rail patronage (section 4.4 of this report) and on road traffic (4.7.14 et seq). Test 4 is met.

Test 5: *New or re-used buildings are included in the proposal only for essential facilities associated with the operation of the park and ride scheme*: No other separate buildings are proposed as part of the car park and ride element of the Scheme. Test 5 is met.

- 4.11.26 The most important aspect of development control applicable to the Green Belt is a general presumption against inappropriate development. Such development should not be approved, except where very special circumstances have been demonstrated whereby any harm caused by inappropriateness and any other harm is clearly outweighed by other considerations.
- 4.11.27 There are various very special circumstances which relate to the Scheme:
- The Scheme comprises improvements to the railway corridor which for most of its length is in the Green Belt.
 - The Scheme would increase rail capacity on the Oxford-Reading-London corridor, provide better access to the rail network for Oxford and north Oxfordshire, and provide a sustainable alternative to the car, particularly for commuting journeys into Oxford.
 - It would help to deliver public policies for economic and spatial development. The relationship between economic growth and rail traffic growth is well understood. Improved access to wider employment markets and economic growth generates business travel. By improving access to Oxford the Scheme would reinforce the City as an economic and research hub. Road traffic congestion would fall (CD/2.23) as rail trips would be increased by the Scheme. The Scheme would serve an area which is the focus for planned growth and economic development, even without the Regional Spatial Strategy housing targets, and would support planned housing and economic growth.
 - It would facilitate the East West Rail link.
 - It would extend the use of an environmentally-friendly and safe form of transport.
 - It would facilitate the redevelopment of Oxford station.
 - The rail aggregates depot is of strategic importance.
- 4.11.28 The Scheme would not cause material harm to the purposes or openness of the Green Belt. All the proposed buildings and structures would be essential for the operation of the Scheme and ancillary structures such as lighting, fencing and signage would be kept to the minimum necessary for safe operation of the railway. The relocation of the rail aggregates depot is essential, but adverse effects can be properly controlled by conditions.
- 4.11.29 The Scheme would not seriously compromise any of the five purposes of including land in the Green Belt. It would have no measurable impact on

the width of the Green Belt, which would remain enough to maintain a clear physical and visual separation between Oxford and settlements in the Green Belt. There would be no significant encroachment into the countryside. The Scheme would not compromise the purpose of preventing towns from merging nor result in unrestricted sprawl of the built area. There would be no impact on the setting or character of Oxford.

- 4.11.30 The proposed Water Eaton Park and Ride constitutes appropriate development in the Green Belt and those elements of the Scheme classified as inappropriate development are justified by the very special circumstances attaching to the Scheme and the rail aggregates depot.

Open Space

- 4.11.31 The definition of open space applied is twofold:

- Under s19(4) of the Acquisition of Land Act 1981 and s336 of the Town and Country Planning Act, open space is defined as “any land laid out as a public garden, or used for the purposes of public recreation, or land being a disused burial ground”.
- PPG17 Planning for Open Space, Sport and Recreation further clarifies this definition as including “all open space of public value”.

- 4.11.32 The Scheme would temporarily require the acquisition of no more than 1.81 hectares of open space, and permanently occupy 1.73 hectares of open space. These amounts are slightly less than shown in the Environmental Statement because of changed proposals at Port Meadow. Open space would be required at three locations: Port Meadow, Tubbs Lane and Gavray Drive.

- 4.11.33 At Port Meadow, the scheme proposals have changed since the Environmental Statement was published. The former proposal to build a bridged access ramp from the Aristotle Lane bridge to the allotment site is no longer being pursued. The proposed temporary land acquisition within the Trap Ground Allotments and the small permanent acquisition of open space on Port Meadow are not now required. Temporary interests in open space at Port Meadow would still be required.

- 4.11.34 **Open space at Tubbs Lane** that would be permanently acquired for the Scheme would extend to 204 square metres. The acquisition would not impact on the overall recreational value of the park or its use and enjoyment by the public. It would be a very small part of a much larger green corridor. A further 2968 square metres of open space would be temporarily acquired for about three months during the construction period. Public access to the remainder of the park could be maintained, and the land would be reinstated after use.

- 4.11.35 **North of Gavray Drive**, the area of permanent acquisition includes 1.71 hectares of privately owned land where there is some evidence of use by the public. Parts of the land appear to be in informal recreational use and Chiltern is treating all of the land to be acquired here as if it were open space for the purposes of the Acquisition of Land Act. The land to be acquired is covered by a planning permission (04/02797/OUT) and the developer, Gallaghers, made representations to the Inquiry. Chiltern proposes an area of replacement open space, east of Charbridge Lane,

extending to 1.78 hectares, as shown on amended sheet number 39 in CD/1.9 (the Open Space Plan). In addition to the land that would be permanently taken, a further 1.29 hectares would be needed temporarily during the works, for about six months. Despite this loss, the remainder of the land north of Gavray Drive, unless already developed, would remain accessible to local residents for informal recreation.

- 4.11.36 Although the land to be acquired for the Bicester Chord is in private ownership, it can be accessed from public footpath FP 129/3 that crosses the site and at other points along the boundary, which is not secure. There is some evidence of use of the land by the public, even though it is not designated as open space nor are there any formal arrangements in place to maintain it as open space. Appendix 10 of document CRCL/P/12/B includes recent photographs of the site.
- 4.11.37 The open space land to be acquired is part of a wider area on which planning permission for residential development has been granted (04/02797/OUT) with land safeguarded at the western end of the site for the Bicester Chord, in accordance with Policy TR29 of the Non-Statutory Cherwell Local Plan. Both the local planning authority, in the Non-Statutory Local Plan, and the Secretary of State, in granting planning permission, have clearly considered the apparent use of this land as open space and decided that this need not fetter the decisions they reached. The planning permission incorporates substantial areas of land as amenity open space and a wildlife site, both available to the general public. The Secretary of State's decision letter is at Appendix 11 of document CRCL/P/12/B and includes, among other things, reference to the site's allocation for employment use in the adopted Cherwell Local Plan and in the Non-Statutory Local Plan.
- 4.11.38 The land to be acquired is a triangular area of uncultivated grassland. The area of which this forms a part is used for informal recreation such as dog walking, and informal paths have been created through use around the field boundary.
- 4.11.39 The replacement open space was selected with regard to the tests in Appendix L of ODPM Circular 06/2004 *Compulsory Purchase and the Criche! Down Rules* (CD/5.19) and those in paragraph 13 of PPG17. There is no better replacement open space that meets the criteria in paragraph 13 of PPG17. The proposed exchange land was chosen because it is:
- Not covered by a planning application or planning permission or subject to a management agreement;
 - Capable of ecological enhancement in line with its status as a County Wildlife Site, in conjunction with the site immediately to the south which is being managed to enhance wildlife interest as part of a Section 106 agreement attached to the Gavray Drive permission;
 - Of a comparable size to the area being taken;
 - Adjacent to the area currently being used as open space;
 - Equally accessible for local residents who currently use the land north of Gavray Drive;
 - Similar in character and capable of use for the same purposes as the

land that would be acquired; and

- Not in active agricultural use.

- 4.11.40 A strategy for the upgrading of the replacement open space has been developed and is shown in Appendix 13 of document CRCL/P/12/B. The site is part of the Gavray Drive Meadows County Wildlife Site. The objective would be to provide an informal open space, retain the pond at the site and enhance the wildlife habitat and ecological value of the County Wildlife Site. Provision would be made for great crested newts and reptiles by mowing some areas in the marshy grassland less frequently. Draft planning condition 5 should provide for the landscaping details of the replacement open space to be the subject of approval by Cherwell District Council.
- 4.11.41 The Exchange Land is in private ownership and would be acquired by exercise of compulsory purchase powers conferred by the Order. Once the works on the Exchange Land have been completed the replacement open space would be open to the public and be vested back to the original owners of the land that was acquired, in accordance with the requirements of s19 of the Acquisition of Land Act. The draft Order contains a provision that, with the agreement of the landowners and Cherwell District Council the land could vest with the Council instead.

Flood Risk and Drainage

- 4.11.42 All aspects of the flood risk and water management assessment work completed have been progressed using the latest available hydrological modelling approved by the Environment Agency and local authorities, and in accordance with current water policy.
- 4.11.43 The Scheme is classified as “Essential Infrastructure” as defined in Annex D2 of PPS25 (CD/3.30). The Sequential Approach has been applied in designing the Scheme and the Sequential and Exception Tests have been passed to the satisfaction of the Environment Agency and local authorities. The Scheme would be built and operated in accordance with PPS25.
- 4.11.44 A Level 2 Flood Risk Assessment was prepared in accordance with PPS25, submitted as Annex G to the Environmental Statement, and subsequently updated in July 2010 in response to comments raised by the Environment Agency. The Scheme is flood resilient and resistant and any residual risk could be safely managed without increasing flood risk elsewhere. The Assessment has directly informed the Scheme design. Betterment in flood risk and drainage management will be provided where practicable.
- 4.11.45 Appropriate design and precautionary storage compensation have been incorporated in the Scheme and as such it can comply with the policy tests in PPS25, and further assessment will continue as the design emerges. A draft planning condition is proposed to secure a Level 3 Flood Risk Assessment.
- 4.11.46 An assessment (CD/2.22) of flood compensatory storage has been carried out since the Environmental Statement was published. The assessment took a precautionary, conservative approach to the joint assessment of the potential flood water storage and surface water

drainage requirements of the Scheme. It found that there is likely to be enough land along the route to provide storage compensation for the Scheme. The areas to be assigned for mitigation are within the limits of deviation for the Scheme, unless specifically designated for the purpose of flood mitigation; they are within the same sub-catchment and as close to the location of loss as is practicable; and they are outside, but ideally close to, Zone 3 so as to provide capacity during a 1:100 year (plus climate change) flood event. Further design work on the Scheme generally will allow compensation design to be further progressed.

4.11.47 In consultation with the Environment Agency, Chiltern has established a "Detailed Drainage Strategy Scope" (CD/2.22) which sets out the approach that Chiltern will take to surface water drainage design. This post-dates the Environmental Statement. The approach will seek to ensure that:

- Betterment is achieved where practicable;
- The SUDS Hierarchy would be applied and SUDS will be designed in accordance with CIRIA Manual C697;
- Enough land is assigned in the Order limits for surface water attenuation storage; and,
- Provision is made for surface water runoff during construction before the permanent works are complete.

4.11.48 The Detailed Drainage Strategy will be fully progressed as the detailed design emerges, and is the subject of a draft planning condition.

4.11.49 A Flood Risk Appraisal of Access and Egress Alterations (CD/2.22) has been undertaken. Further work is being carried out.

4.11.50 The Environment Agency (Objector 248) submitted a Note dated 23 September 2010 which recognises that all matters then outstanding could be dealt with through the Protective Provisions in the draft Order and through revisions to the draft planning conditions as they stood at that time.

4.11.51 The Scheme has been designed to avoid, reduce and where necessary mitigate flood risk and impacts on water resources taking full account of the flood risk sensitivities in the area. The Environment Agency is satisfied with the Protective Provisions and that appropriate conditions can be put into place to secure necessary requirements.

Landscape Impacts and Mitigation

4.11.52 There are no designated landscapes in the visual envelope of the Scheme.

4.11.53 The effect of the Scheme on the landscape is assessed in Chapter 7 of the Environmental Statement (CD/1.16).

4.11.54 The Scheme would result in direct impacts on the landscape, indirect impacts on landscape character and impacts on viewers and visual amenity. Bridge structures and embankments would be visible in the landscape but would not have a significant effect on the character of the landscape. Residents of some properties close to newly-bridged rail crossings will experience adverse visual impacts: for example, from Elm

Tree Farm and properties close to Tubbs Lane, Bicester and Mill Lane, Islip. Elsewhere, visual impacts would be beneficial. The proposed station developments at Bicester Town, Islip and Water Eaton Parkway are expected to improve the character of the local landscape. Removal of the large derelict grain silo at Water Eaton Parkway would be a particular benefit.

- 4.11.55 The design includes a number of mitigation measures. Mature planting would be widely used and the built elements of the Scheme would be well designed, with materials and finishes respecting the context. Conditions are proposed to ensure that detailed landscape designs will be agreed with the local authorities, and that planting will become properly established.
- 4.11.56 Illustrative designs are presented in the Revised Design and Access Statement (CD/1.19/1).
- 4.11.57 At Water Eaton Parkway Station, the Scheme would be located largely between the railway and the existing park and ride facility. The existing prominent grain silo building would be demolished, to the benefit of the local landscape character. The station building and car parking would have some limited impacts on landscape character. A future single deck parking area (of around 190 spaces) would be located over part of the new surface parking; this would only be visible within the local landscape to the east, which comprises the existing car parking. Mitigation planting would provide some visual screening of this structure from the east whilst visual screening from the west would continue to be provided by the existing road embankment and hedge and scrub screening on the west of the railway. The sensitivity to change of the landscape here is low, by virtue of the presence of the railway, the park and ride site, major roads, the aggregate depot and the grain silo. Photomontages of the station area are presented in the Revised Design and Access Statement January 2011 (CD/1.19/1).
- 4.11.58 Boundary hedge and tree planting would be introduced to visually screen the proposed aggregates depot. The depot would extend into open country but would be visible from the south east only and would be screened largely from view on the northern side of the railway by the A34 road. There would be a minor impact on the landscape by virtue of the visibility of the sidings, plant/buildings and minerals stockpiles, but the proposed screening would grow and reduce that impact. Conditions are proposed to regulate lighting at the site and the height of stockpiles.
- 4.11.59 The Scheme would give rise to no significant adverse landscape and visual impact after construction and maturing of the proposed landscaping.

Cultural Heritage

- 4.11.60 The Scheme runs close to four Conservation Areas, at Bicester, Islip, Wolvercote and Central Oxford. The Scheme's effects on their settings would be more than of minor significance (in the terms defined in Chapter 7 of the Environmental Statement, CD/1.16) only at Islip, where the new bridleway bridge in Mill Lane would be visible from the Conservation Area. With mature planting, the effect of the bridge could be reduced.

4.11.61 The effect of the Scheme on the Conservation Areas at Bicester and Wolvercote would be not significant. In respect of Islip and Central Oxford conservation areas, the Environmental Statement reports as follows:

- a) At the Islip conservation area, the proposed Mill Lane overbridge would impact on the surrounding landscape because of its visibility. The proposed embankments would be visually prominent in the local landscape and would obstruct views across the local farmland. Impacts would also arise from the partial visibility of the proposed bridge. Views of the bridge would be gained from the southern edge of the conservation area. The significance of the resulting impact on the setting of the conservation area would be "minor to moderate".
- b) At the Central Oxford conservation area, the potential for views of the proposed station development is unlikely for most listed buildings in the conservation area. The removal of run-down and somewhat derelict structures and replacement with new buildings would benefit the surrounding area. The significance of the resulting impact on the setting of the conservation area would be "minor".
- c) The scale of impact significance used in this part of the Environmental Statement is as follows:

Category	Rank
"Not significant"	1 – (least significance)
"Minor"	2
"Minor to moderate"	3
"Moderate"	4
"Moderate to major"	5
"Major"	6 – (greatest significance)

4.11.62 Chapter 10 of the Environmental Statement concludes that there would be no direct impacts on listed buildings in respect of the built elements of the Scheme. The effects on the settings of listed buildings would be "minor to moderate" at worst as most would be visually separated from the Scheme by vegetation. The setting of Islip Mill (Grade II listed) would experience an impact of "minor to moderate" significance, and the settings of five other Grade II listed buildings would experience impacts classified in the ES as of "minor" significance. They are Station House, Bicester; Barndon Farmhouse, Northfield Farmhouse and the barn and stable range at Northfield Farm, and Middle Farmhouse.

4.11.63 The Scheme would not affect the positive contribution of these heritage assets to local character and sense of place and so would not conflict with the requirements of PPS5.

4.11.64 The interactions between the Scheme and the scheduled monuments at

Alchester and Rewley Abbey Stream have been considered elsewhere in this report (4.5.12, 4.5.34, 4.11.5, 4.11.20). The works there are an integral part of the Scheme. The proposed mitigation works are sufficient to ensure that the Scheme would not result in any significant adverse residual effects on important archaeological remains or cause substantial harm to the setting of either scheduled monument.

- 4.11.65 The Scheme would result in construction effects to non-designated cultural heritage sites, identified in the Environmental Statement (using the 8-point scale of the DMRB's HA208/07) as follows:
- a) The partial removal of some 26 Important Hedgerows, resulting in effects of slight significance in each case. No significant cumulative effect would arise as these are dispersed over a fairly wide area.
 - b) Impacts upon six railway bridges and viaducts (through rebuilding or potential changes in setting). The effects of the Scheme to five of these structures should be mitigated by recording the structures before the works start.
 - c) Removal of the Grain Silo at Water Eaton (an historic structure) would, with mitigation, reduce to "moderate" significance (the sixth highest level). Mitigation measures could include both detailed photographic and drawn recording of key features and recording, analysis and potentially removal and preservation of key internal features such as machinery or artefacts.
- 4.11.66 The Scheme may result in physical impacts to five identified archaeological sites or groups of sites, in addition to the Roman town. These comprise:
- An Iron Age and Post-Medieval site north of Gavray Drive, where the Bicester Chord would be built;
 - Ridge and furrow earthworks at Holts Farm, where Work No. 13 would be built;
 - A complex of crop marks of possible prehistoric origin, potentially impacted by the Oddington footbridge; and,
 - Possible remains of the 19th century stations at Islip and Oxford, impacted by the rebuilding of each station.
- 4.11.67 The Second Addendum to the Environmental Statement finds, in respect of Cultural Heritage and Archaeology, that neither the order application alignment of Work No. 11 nor the alignment of Work No. 11 considered in the Second Addendum would have any significant impact on archaeological deposits or on Cultural Heritage.
- 4.11.68 At each of the sites the effects of the mitigated Scheme would be generally slight. However, cumulatively, the overall effect on cultural heritage and archaeology would be "slight to moderate", the fourth rank in the DMRB's eight-point scale.

Other Environmental Issues

- 4.11.69 **Air quality** – The Environmental Statement ("the ES") concludes that

pollutant concentrations at residential properties closest to the railway would not experience significant air quality impacts from moving or idling trains. Air quality modelling reported in the ES suggested that emissions from the Scheme might affect adjacent habitats at the SAC and the two SSSIs, and that is considered elsewhere in this report (4.9.10, 4.9.24, 4.9.26).

- 4.11.70 The air quality assessment criteria for human health are based on the UK Air Quality Strategy (DEFRA, 2007). They are:

Air Quality Assessment Criteria For Protection Of Human Health		
Pollutant	Value (µg/m ³)	Averaging period
Nitrogen Dioxide	40	Annual mean
	200	Hourly mean
Sulphur Dioxide	125	Daily mean
	350	Hourly mean
	266	15 minute mean
Particulate Matter (PM ₁₀)	40	Annual mean
	50	24 hour mean

- 4.11.71 The air quality assessment criteria for the protection of ecology, identified by the UK Air Quality Strategy, include site-specific assessment criteria for acid deposition and nutrient nitrogen deposition, and the following generally applicable air quality assessment criteria:

Nitrogen oxides (NO_x) Annual mean concentration 30 µg/m³
Sulphur dioxide Annual mean concentration 20 µg/m³.

- 4.11.72 The air quality effects of the rail component of the Scheme are assessed in the ES (CD/1.16 and CD/1.18) by estimating the existing baseline air quality and predicting the effect of emissions associated with trains using the Scheme. With Phase 2 of the Scheme in operation, the annual mean total concentrations of three main pollutants, expressed as percentages of the AQS acceptability criteria, are found by the ES (CD/1.16, Tables 13.11 and 13.12) to be not greater at any receptor on the scheme than:

NO₂: Not greater than 60% of the AQS anywhere, and not increased by the Scheme by more than 20.5% of the AQS.
PM₁₀ particulates: Not greater than 55% of the AQS anywhere, and not increased by the Scheme by more than 0.81% of the AQS.
SO₂: Not greater than 20% of the AQS anywhere, and not increased by the Scheme by more than 7.7% of the AQS.

- 4.11.73 Air quality assessment criteria for the protection of ecology include site- and location-specific elements, as set out in Table 13.15 of the ES. The effect of emissions from trains running on the Scheme has been

modelled for sensitive ecological sites and other locations using the ADMS dispersion model, the use of which is recognised by the various regulatory authorities including the Environment Agency. The meteorological data used in the modelling came from the weather station at Brize Norton. Hourly datasets were obtained for a five-year period. The predominant wind direction is from the south west. Local roads around Water Eaton and Bicester stations are expected to see an increase in traffic due to the Scheme, and the effect of emissions from road traffic generated by the Scheme have been evaluated using the Design Manual for Roads and Bridges ("the DMRB") Screening Method (HA 207/07). The pollutants evaluated are nitrogen dioxide (NO₂) and particulate matter, which are the main pollutants associated with traffic emissions.

- 4.11.74 The DMRB method defines "affected" roads as those that meet any of five criteria, all of which relate to changes in the traffic flow or the alignment of the road. The ES (CD/1.18, section J3) applies the daily traffic flow criterion and the daily "heavy duty vehicle" criterion and finds an "affected" road only in the case of the former:

Traffic Data For Water Eaton						
Road	Total Traffic AADT – Year 2016			Total Traffic AADT - Year 2026		
	Do Min	Do Scheme	Change	Do Min	Do Scheme	Change
A4165 Banbury Rd	19200	19836	636	19200	20035	835
A4165 Oxford Rd	20961	21596	635	20961	21795	834
A4260 Frieze Way	13102	13483	381	13102	13602	500
A4260 north	21129	21256	127	21129	21296	167
Bicester Rd	9070	9197	127	9070	9236	166
Site Access	1285	2556	1271	1285	2953	1668

- 4.11.75 The DMRB threshold is an increase in the traffic flow of 1000 AADT (annual average daily traffic) or more. At Water Eaton, only the site access would have such a change (shown in bold in the preceding table). A similar analysis at Bicester (following this paragraph) finds that only Station Approach is "affected" there. Therefore these two roads have been subjected to DMRB screening, with a conservative assumption that the nearest receptor is 5 metres from the roads.

Traffic Data For Bicester						
Road	Total Traffic AADT – Year 2016			Total Traffic AADT - Year 2026		
	Do Min	Do Scheme	Change	Do Min	Do Scheme	Change

B4100 London Road west	11699	11699	749	12448	12685	986
B4100 London Road east	11704	11704	749	12453	12690	986
Station Approach	864	864	1498	2362	2836	1972
B4100 Launton Road	10142	10142	413	10555	10686	544

4.11.76 Modelling of the road traffic–sourced contaminants in accordance with the DMRB method gives the following results:

Location	Parameter	Finding			
		2016		2026	
		No Scheme	With Scheme	No Scheme	With Scheme
P&R Access, Water Eaton	NO ₂ , Annual mean, µg/m ³	13.31	13.61	13.28	13.64
	PM ₁₀ , Annual mean, µg/m ³	16.60	16.69	16.59	16.71
	PM ₁₀ , No of days > 50 µg/m ³	0.54	0.58	0.54	0.59
Station Approach, Bicester	NO ₂ , Annual mean, µg/m ³	13.14	13.37	13.13	13.43
	PM ₁₀ , Annual mean, µg/m ³	17.56	17.65	17.56	17.68
	PM ₁₀ , No of days > 50 µg/m ³	1.08	1.15	1.08	1.17

4.11.77 The combined modelled results in the north Oxford area include the following:

/over

NOx and Deposited Nitrogen at Stated Sites, With Scheme						
Site	NOx ($\mu\text{g}/\text{m}^3$) Annual mean			Deposited Nitrogen (kg/Ha/yr)		
	Road (as NO ₂)	Rail (Phase2)	Total	Road	Rail (Phase2)	Total
Port Meadow with Wolvercote Common & Green SSSI		4	25.5		0.58	20.9
Wolvercote Meadows SSSI		1	22.5		0.14	20.4
Pixey & Yarnton Meads SSSI		1	23		0.14	20.0
Water Eaton Site Entrance (Year 2026)	0.36		13.64			Not stated
Note: "Road" (or "Rail") = effect of Scheme-related road (or rail) traffic.						

- 4.11.78 Three SSSIs are shown in the preceding table. At each, the critical level for NOx is 30 μg per cubic metre and the critical load for nitrogen disposition is 20-30 kilograms per hectare per year. The ES presents more results (CD/1.16, tables 13.14 and 13.17). The ES also explains that contributions to nitrogen deposition on grassland are calculated by multiplying the Scheme-related NO₂ concentration (in micrograms per cubic metre) by 0.0015 and then by 96 to obtain the annual deposition rate (in kilograms per hectare per year).
- 4.11.79 The significance of long term changes to air quality have been assessed using these criteria (adapted from Environment Agency guidance):
- If the change in concentration due to the Scheme is not more than 1%, then the long-term impact is considered to be insignificant;
 - If the total concentration is more than 70% of the assessment criterion, then the long-term impact may need to be considered further.
- 4.11.80 The following conclusions are drawn in respect of the changes brought about by the proposed rail scheme:
- a) Concentrations of NOx at all evaluated ecological sites are higher than 70% of the assessment criterion, but do not exceed the assessment criterion, except at Wendlebury Meads and Mansmoor Closes SSSI, discussed elsewhere in this report (4.9.24).
 - b) Sulphur dioxide concentration changes due to the Scheme are less than 1% (and therefore insignificant) at Wolvercote Meadows SSSI, Pixey and Yarnton Meads SSSI, New Marston Meadows SSSI and Wytham Woods SSSI; and do not exceed 70% of the critical level at other ecology sites. SO₂ impacts on the ecological sites are not significant.

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- c) Acid deposition would change by less than 1% at Wolvercote Meadows SSSI, Pixey and Yarnton Meads SSSI, New Marston Meadows SSSI and Wytham Woods SSSI. At Wendlebury Meads and Mansmoor Closes SSSI the baseline level already exceeds the critical load. At all other ecological sites the effect would be not significant.
- d) Nutrient nitrogen deposition would increase insignificantly at Wolvercote Meadows SSSI, Pixey and Yarnton Meads SSSI and New Marston Meadows SSSI. At Wytham Woods SSSI the baseline is already high. When using the upper range of the critical load, Oxford Meadows SAC, Wolvercote Meadows SSSI and Pixey and Yarnton Meads SSSI would not experience significant impacts from nutrient nitrogen deposition as the total deposition rates would be less than 70% of that critical load.
- 4.11.81 Road traffic generated by construction work associated with the Scheme would be less than the “affected roads” definition of the DMRB for use in air quality assessments. Therefore, air quality impacts from construction traffic are not expected.
- 4.11.82 Dust raised during construction is considered by the ES, and the Code of Construction Practice would secure appropriate mitigation measures. Carbon dioxide emissions associated with transport are estimated in the Environmental Statement but that work has since been revisited. The revised modelling is in the Demand and Revenue Forecast (CD/2.30) and the Further Highway Impact Assessment (CD/2.23). The Scheme would give rise to a reduction in carbon emissions of 1.1 kilo tonnes in 2016 and 1.2 kilo tonnes in 2026.
- 4.11.83 **Contaminated Land and Land Quality** – A land quality assessment was carried out in accordance with PPS23 (CD/3.12) and best practice from DEFRA and the Environment Agency. As reported in Chapter 15 of the Environmental Statement, this identified potential risk to the surrounding land and water courses via rack drainage and runoff. The Code of Construction Practice Revision Two Draft and the drainage strategy include containment measures, measures for handling waste and materials, and the investigation and sampling of soils before work starts. These measures would ensure that any existing contamination likely to be disturbed by the works and any risk of contamination during construction can be fully mitigated.
- Crossings, Footpaths and Bridleways Closures and Diversions***
- 4.11.84 In developing the proposals for changes to the public rights of way network, Chiltern has been mindful of section 5(6) of the Transport and Works Act 1992 that the Order should not extinguish any public right of way over land unless:
- An alternative right of way would be provided; or,
 - The provision of an alternative right of way is not required.
- 4.11.85 The Scheme proposal is to remove all level crossings other than that at London Road, Bicester (4.6.6). Proposals for changes to the public right of way network were developed in consultation with interested parties
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and the wider public. In some cases diversion of the route is proposed and in others, where it is necessary to maintain a right of way across the railway, a new crossing is proposed. Where a pedestrian link is provided, this takes the form of a footbridge. Where the route to and from the bridge would be accessible to mobility-impaired users, ramps would be provided on the bridge but elsewhere (for example where the route also includes muddy uneven ground or stiles) only steps are proposed.

- 4.11.86 The level crossings affected by the Scheme are identified in paragraph 4.6.7 of this report. In the following cases, closure of a level crossing would result in a change in length of a public right of way:

Location	Type	Reference Number	Change in Length of Public Right of Way
Langford Lane	Highway		To Bicester: +2.49 km From Bicester: +1.96 km
Elm Tree Farm No. 1	Footpath	FP 398/6	+0.10 km
Wendlebury Foot	Footpath	FP 398/2	+0.69 km
Beebont	Bridleway	BR 157/4	+0.89 km
Oddington Foot	Footpath	FP 318/6	+1.73 km
Yew Tree Farm	Footpath	FP 318/2	+0.71 km
Islip Foot	Footpath	FP 318/7	+0.50 km
Islip No. 4	Footpath	FP 260/4	+0.39 km
Mill Lane, Islip	Road to become bridleway		+0.15 km
Water Eaton No.5	Bridleway	BR 229/5	-0.19 km
Gosford & W Eaton 4	Footpath	FP 229/4	+0.15 km

- 4.11.87 **Langford Lane** crossing was the subject of objections and is considered later in this report.
- 4.11.88 **Mill Lane, Islip** – This is a miniature warning light equipped level crossing with user-operated gates. It is proposed to be replaced with a foot and equestrian bridge. Access across the railway would be via Kidlington Road bridge. As the Mill Lane bridge would replace an existing surfaced road it would be designed to comply with the requirements of the Disability Discrimination Act with ramps sloped at 1 in 20. The bridge location was chosen to minimise visual impact and land severance and to avoid wildlife habitats. Chiltern has given full consideration to the alternative arrangements proposed by local people, as set out in the *Islip Mill Lane Level Crossing Replacement Alternatives Report* (Appendix 19 of CRCL/P/12/B). Oxfordshire County Council, the local highway authority, was among the consultees and observed that “the existing route has a practical function providing a quiet road linking two bridleways. OCC gives high priority for equestrian needs as vulnerable road users. OCC has concerns with the diversion for pedestrians and horse riders through the village as the roads are narrow and steep with poor visibility.” The County Council asked that the level crossing be kept open for horses and pedestrians, but that would not be safe. The County Council has removed its detailed point of objection on all public rights of way matters, as set out in their Statement of Case.
- 4.11.89 The Scheme proposal for Mill Lane is the best solution, for the reasons given in the *Alternatives* report.

- 4.11.90 **Beebont Bridleway** – Various parties have made objections and representations regarding the alterations proposed in this area, and those appear later in this report. The Scheme proposal is shown by document CRCL/INQ/44/1.

Adoption of Bridges and Roads

- 4.11.91 All new highways, including footpaths and bridleways, are to be adopted by Oxfordshire County Council a year after the completion of works. Where bridges are provided for dual use as bridleway and private accommodation crossing, these would not be maintained by the County Council and would be the landowner's responsibility.

Consolidated Request For Direction And Planning Conditions

- 4.11.92 Document CD/1.12/4, dated 27 January 2011, is Chiltern's final consolidated Request for Direction under section 90(2A) of the Town and Country Planning Act 1990, Conditions to be attached to the Direction, and Statement of Reserved Matters.

- 4.11.93 Appendix 2 of Document CD/1.12/4 sets out the planning conditions proposed by Chiltern. The topics covered include:

- 1 Time limit.
- 2 Development sections.
- 3 Design, external appearance and materials.
- 4 Implementation and maintenance of railway fencing.
- 5 Landscaping.
- 6 Implementation and maintenance of landscaping.
- 7 Archaeology.
- 8 Protection and enhancement of the setting of the swing bridge at Rewley Abbey Stream.
- 9 Contaminated land.
- 10 Flood risk assessment.
- 11 Surface water drainage assessment.
- 12 Safe access and egress under flood conditions.
- 13 Water pollution control.
- 14 Protection of national and European designated sites.
- 15 Restoration of land used temporarily for construction.
- 16 Code of construction practice.
- 17 Operational noise and vibration monitoring and mitigation.
- 18 Aggregates depot rail use.
- 19 Aggregates depot throughput.
- 20 Height of stored aggregates.
- 21 Aggregates depot floodlighting.
- 22 Aggregates depot hours of operation.

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| 23 | Aggregates depot sheeting of lorries. |
| 24 | Aggregates depot control of dust and debris. |
| 25 | Car park provision and management at Water Eaton Parkway. |
| 26 | Lighting of footbridge and approach ramps at Mill Lane, Islip. |
| 27 | Conservation of Tassel Stonewort. |
| 28 | Management of habitat to assist in the conservation of Brown Hairstreak butterfly. |
| 29 | Approvals. |
| 30 | Implementation. |
- 4.11.94 Appendix 3 of Document CD/1.12/4 sets out the matters proposed by Chiltern to be reserved for subsequent approval by the relevant local planning authority. The topics covered include:
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|---|--|
| 1 | <p>Details of the layout, scale, appearance and facing materials for:</p> <ul style="list-style-type: none">- Bicester Town Station: station buildings, platforms, footbridge, canopies, car parks, and vehicular and pedestrian access.- Islip Station: platform alterations, waiting facilities, pedestrian ramp and parking alterations.- Water Eaton Parkway station: station buildings, platforms, footbridge, canopies, car parks, and vehicular and pedestrian access; the layout of the access road to the rail aggregates depot.- Oxford station: station buildings, platforms and waiting facilities, and any alterations to vehicular or pedestrian access.- Bridges elsewhere on the Scheme which would be new or substantially reconstructed, where described as a numbered Work in Schedule 1 to the Order.- The layout of the vehicular road from Wendlebury Road to Langford Lane, intended to replace the Langford Lane level crossing.- Any other building of more than 25 square metres footprint.- Any buildings, hardstandings, weighbridges and other fixed plant to be provided at the replacement rail aggregates depot at Water Eaton. |
| 2 | <p>Details of any new permanent boundary fencing or other means of enclosure, which abuts a highway, residential or commercial premises.</p> |
| 3 | <p>A landscaping scheme, including details as described in Document CD/1.12/4 of landscaping to be undertaken at:</p> <ul style="list-style-type: none">- Bicester Town station, Islip station, Water Eaton Parkway Station and the aggregates depot, and Oxford station. |
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- Tubbs Lane.
- Works Nos. 6, 11, 12, 13, 14, 15, 16, 17, and 18.
- Rewley Abbey Stream bridge (also known as Sheepwash Channel bridge).

5 THE CASES FOR THE SUPPORTERS

The gist of additional evidence given at the Inquiry by supporters of the Scheme was as follows:

5.1 Railfuture (Supp 14)

- 5.1.1 Water Eaton Parkway will be of benefit to residents of west Oxfordshire villages, still having to use their cars because they do not have easy access to regular buses to Oxford or to Cotswold Line services. For signalling reasons west of Oxfordshire, it is not possible for Cotswold Line services to offer late evening (e.g. after theatres) departures from Paddington. The west Oxfordshire villages therefore depend on access to the Chiltern Line or to Oxford itself.
- 5.1.2 The scheme would enable rail to be the mode of choice for Oxford, leading to reduced emissions and overall noise from main roads and motorways, and fewer accidents. The promoters assume that 1000 journeys per day would be removed from the A34, but that evidence from elsewhere suggests that this figure is conservative. Schemes at Alloa, Ebbw Vale and Mansfield suggest that objective could be exceeded by 230%. Extra trains were introduced on the Oxford/Bicester line in 2009, funded via the County Council from developer contributions, and passenger numbers have increased by over 70%.
- 5.1.3 The Scheme route would pass through areas of significant wealth (central Oxford and central and west London), areas of mixed fortune (Kidlington and Bicester), and areas of higher unemployment (High Wycombe). The connectivity between these diverse locations would be a major contributor to reducing unemployment and other aspects of deprivation.
- 5.1.4 Railfuture held an independent public meeting about the scheme in the Methodist Hall in Bicester on 25 June 2009. The meeting was attended by in the region of 80 members of the public and, on a show of hands, some 90% expressed support for the Scheme.
- 5.1.5 Chiltern has said that it will follow policies and standards laid down by the Office of Rail Regulation and Network Rail to take all reasonable opportunities to remove or replace level crossings. But there should be individual solutions for individual locations, not the blanket adoption of expensive rules. Railfuture supports the objections raised to the inconvenience that would be created by the closure of level crossings by the Scheme, but notes that safety is very important. There are far more dangerous locations on the local highway network (for example, on the A41 and the A44) where people have to cross high speed dual carriageways to reach bus stops; but there are no proposals at such sites to built "DDA" compliant bridges.

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- 5.2 **Lord Bradshaw** (Supp 16)
- 5.2.1 Lord Bradshaw appeared in his personal capacity.
- 5.2.2 The Scheme would create a new route from Oxford to London Marylebone, and would support the proposed East West route. There would be strong demand for the service, especially from Water Eaton Parkway. Most of the potential objections to the Scheme are capable of mitigation; the Scheme would not cause any lasting damage to the natural environment. Oxford deserves a better train service than it has, and competition with the existing provider would be likely to stimulate a positive response, favourable to existing users.
- 5.3 **Bicester Vision** (Supp 25)
- 5.3.1 Bicester Vision is a public/private partnership established three years before the Inquiry, between the three tiers of local government and the major private sector businesses in the town. Mr Langton appeared for Bicester Vision and also on behalf of the Bicester & District Chamber of Commerce and the Oxfordshire Economic Partnership. Those organisations fully support the Scheme, which would bring many benefits to Oxfordshire as a whole and to Bicester.
- 5.3.2 The A34 south to Oxford and beyond is one of the busiest links in the South Midlands, and is often blocked at peak times. The Scheme would alleviate this as it would provide an excellent transport system for commuting, shopping and entertainment. Visitors to Bicester Village – who number some four and a half million each year – would also find the new service useful.
- 5.3.3 RAF Bicester has been sold in recent months, and the site is likely to be the subject of a major mixed use planning application soon. The MoD has recently started public consultation involving their considerable land holdings at Graven Hill, Bicester, and their initial thoughts are for a further 1800 homes, up to 5000 jobs and a range of other facilities. This, alongside the EcoTown proposals, shows that Bicester is poised for major growth. Project Evergreen is coming at just the right time for the town to fully benefit from these proposals.
- 5.3.4 Oxfordshire City Region, which includes Bicester and Cherwell District, was shortly before the Inquiry granted Local Enterprise Partnership status. Bicester is one of the three key growth points in the bid. A reliable and regular rail service will be vital for Bicester, which stands strategically at the heart of the region.
- 5.4 **First Great Western** (Supp 20)
- 5.4.1 First Great Western has been working in partnership with Chiltern since early in 2009 on the effects of the Scheme, with particular reference to the train service changes and impacts at Oxford station. The two organisations have a full understanding of the scheme and the benefits it will bring for rail users. First Great Western fully supports the Scheme.
- 5.5 **Rail Freight Group and Lord Berkeley** (Supps 38 and 15)
- 5.5.1 Lord Berkeley spoke for the Rail Freight Group and on his own behalf.
- 5.5.2 The Rail Freight Group was formed in 1991. It represents over 150 companies in the UK who operate freight trains, ports and freight
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- terminals, and who ship their goods by rail. The Rail Freight Group aims to promote cost effective solutions for rail freight, to represent the views of its members and to provide advice and information on the rail freight industry.
- 5.5.3 Rail freight is responsible for around 12% of all freight movement in the UK, and transports over 120 million tonnes a year. In the past 10 years rail freight traffic has grown by over 60%, and is forecast to double in the next 10 years, primarily in the intermodal sector. Rail freight removes traffic from the roads, cutting emissions and improving road safety.
- 5.5.4 The Rail Freight Group fully supports the Scheme, because it would facilitate the East West Rail project, in accordance with the Department for Transport's plans for the UK Strategic Freight Network. And the upgrading of the line to W12+ gauge would enable 9'6" high shipping containers to be carried on conventional-height wagons, which in turn would enable more units to be carried on a standard length train, making rail freight more competitive and therefore growing the volumes carried by rail.
- 5.5.5 The Group agrees with Chiltern's analysis that:
- It is unlikely that the Bicester-Oxford route would see any increase in freight traffic until the East West Rail link is reopened at least as far as Bletchley;
 - The main freight use of the East West Link would probably be for container trains from Southampton to the Midlands as an alternative to the present route via Oxford and Banbury; and,
 - Rail freight operations vary significantly from day to day, and it is likely that not all planned freight train paths would be used on any given day.
- 5.5.6 Lord Berkeley's own evidence was that, for passengers, the benefits of a second service from London to Oxford would be high. The current half-hourly service via Reading provides good capacity but suffers from unreliability, particularly around Reading. Projected works at various parts of the Great Western Main Line would result in perhaps ten years of disruption. The alternative that the Scheme would provide would be welcomed by Oxford passengers and the competition it would bring would no doubt ensure better services on both lines. And the proposed Water Eaton Parkway station would not only reduce traffic in North Oxford but also reduce journey times for drivers from outside Oxford to London.
- 5.6 **Dame Fiona Caldicott** (Supp 34)
- 5.6.1 Dame Fiona Caldicott appeared in her capacity as the Principal of Somerville College.
- 5.6.2 The capacity to come to work in Oxford, and then to be able to commute to London Marylebone on the proposed service would add a great deal of flexibility of travelling to the many people who live in north Oxfordshire and work in Oxford. The current rail service between Oxford and London Paddington is not of comparable quality to that provided by Chiltern Railways between Birmingham and London Marylebone; it is less reliable

and subject to serious disruption of service.

5.7 **Network Rail** (Supp 41)

5.7.1 Network Rail has concluded four agreements with Chiltern Railways:

- The Asset Protection Agreement outlines the terms under which Network Rail will act as the owner of the railway network and stipulates arrangements for approval by Network Rail of the Scheme details.
- The Asset Purchase Agreement outlines the terms of the financing made available by Network Rail to Chiltern Railways for the Scheme.
- The Supplemental Track Access Agreement sets out the terms by which Network Rail provide Chiltern Railways with access to the rail network.
- The Overarching Bicester Oxford Agreement relates to the proposed Order and its effects on Network Rail's interests.

5.7.2 Network Rail supports the Scheme because:

- It would help Network Rail meet its commitment to increase rail network availability, by offering passenger operators an alternative route between Oxford and London as Network Rail continue to maintain or enhance the network in other areas, such as at Reading.
- It would help Network Rail meet its commitment to maintain network capability at the levels recorded during April 2009: the line speed and gauge would be increased.
- It would help Network Rail meet its commitment to increase capacity on the rail network.
- It would reduce safety risk, by removing level crossings. Network Rail supports the closures proposed as part of the Scheme.
- Chiltern Railways are a key customer of Network Rail, operating a high-performing passenger railway with a history of investment schemes that have been successfully implemented to the benefit of the travelling public. The Scheme would improve customer satisfaction.

5.8 **Oxford United Football Club Ltd** (Supp 32)

5.8.1 This is the local professional football club in Oxfordshire. The Club wholeheartedly supports the Scheme. Many supporters travel by train to matches at Oxford. The Club's training ground is in Bicester and so the Scheme would be very useful to a lot of local supporters.

5.9 **Aylesbury Vale Advantage** (Supp 39)

5.9.1 Aylesbury Vale Advantage is a public private partnership that seeks to encourage development in Aylesbury Vale. The East West Rail proposal is important to Aylesbury Vale Advantage because it would reduce road traffic congestion and promote greater efficiency of movement. Aylesbury Vale Advantage supports the Scheme because it would be an advantageous step toward delivery of a wider strategic network.

5.10 **Additional Matters In Support Of The Scheme Raised In Written Representations**

5.10.1 **The Rt Hon Andrew Smith MP** (Supp 6) refers to the effect on air quality that reduced car travel to and from London would have, the

safety benefits the Scheme is expected to bring and the reduction in traffic congestion. The Scheme would benefit the public and help achieve Government targets.

- 5.10.2 **Woodstock Town Council** (Supp 13) considers that Water Eaton Parkway station would be convenient for Woodstock residents and would reduce pressure on car parking facilities at Hanborough station.
- 5.10.3 **Kidlington Parish Council** (Supp 18, Obj 311) expressed support for the Scheme in its Statement of Case, dated August 2010. In September the Council submitted a proof of evidence which explained that, while supporting the principle of the Scheme, the Council objected to details of the proposals. By the time of the Council's appearance at the Inquiry, on Day 17 (8 December 2010) further discussions had taken place between the Council and Chiltern and the Council was able not only to withdraw its objection but to come forward as a supporter of the Scheme. The Council is aware that Chiltern has established a well-deserved reputation for innovation and for providing high quality services. The Council looks forward to having vastly improved local access to a railway station with high-quality links across the network. Document CRCL/INQ/36 is a statement of common ground signed on behalf of Chiltern and the Council.
- 5.10.4 **London Oxford Airport** (Supp 26) points to the possibility that the Water Eaton Parkway station could be used for public transport trips to the Airport, whereas now virtually all passengers drive to the airport, as the only practical option.
- 5.10.5 **Wycombe District Council** (Supp 43) resolved at its meeting on 11 October 2010 that "This Council fully supports Project Evergreen 3 and the Transport and Works Act Order application which needs to be secured to enable Phase 2 to complete. This Council recommends that the Secretary of State for Transport approves the Transport and Works Act Order which will permit the High Wycombe to Oxford link and unlock significant transport and economic benefits to Wycombe District and to the County of Buckinghamshire."

6 THE CASES FOR THE OBJECTORS

The cases of those objectors who appeared at the Inquiry are reported largely in order of appearance. Additional points from written representations are then reported in order of assigned objector number.

The material points were:

- 6.1 **The Trap Ground Allotment Association** (Obj 13)
- Introduction*
- 6.1.1 The Trap Ground Allotments are on the western side of the railway, at Port Meadow, and a distance south of Oxford North Junction. Here the railway is crossed by Aristotle Lane bridleway bridge and by a pedestrian level crossing that gives access to the allotments only. Currently the railway here is used by trains on the Banbury line, the Cotswold line and the Bicester line.

Background

- 6.1.2 The Trap Ground Allotment Association ("the Association") together with two individual members and Oxford City Council have submitted statements of case objecting to the closure of the level crossing access to the allotment site. A third individual member of the Association also gave evidence at the Inquiry.
- 6.1.3 The Association has 150 members, drawn from many social, economic and age groups. They and their family members and friends enjoy the beauty and productivity of the site. The ten acres of land have been in allotment use since after the first world war, as has the railway crossing which was associated with the Port Meadow Halt on the earlier line. The neighbouring bridge has also been in place for several decades.

Objection

- 6.1.4 The Association objects to the proposal to close the level crossing, which offers the best means of access to the allotments by the great majority of its members. Railway policy is that level crossings are not to be constructed on new railway lines other than in exceptional cases. The Association wishes to establish the exceptional nature of this particular crossing.
- 6.1.5 Allotment sites must have convenient access, which should be level as raw materials and produce require regular transport to and from the site.
- 6.1.6 The site is unusually isolated on the eastern edge of Port Meadow, a site of special scientific interest and a particularly valued area of water meadow, wildlife and recreation for Oxford's population. As access to Port Meadow is restricted, the path over the local, narrow railway bridge becomes crowded with cycles, push chairs, walkers and others, particularly at weekends, so that allotment holders hardly ever use it. But above all, it is steep and increases the distance to most of the allotments. This makes the burden of access too severe for practical and convenient use. The bridge path is also habitually neglected, dog-fouled and, on the Meadow side of the bridge, prone to flooding which makes it unusable in severe conditions.
- 6.1.7 Most members reach their allotments by bicycle, using the level crossing. The bridge route, even refurbished, is most likely to require cyclists to walk to avoid unsociable contact with other users – so measurement of distance, while illustrative, gives only a partial view of the inconvenience this route would cause. And there have been almost 2000 new houses built in the "canal corridor" including two large developments near the bridge, so pressure on this access has greatly increased.
- 6.1.8 For these reasons the Association has repeatedly – most recently in 2002 – resisted attempts by authorities to close the crossing. The Association has illustrated the safety of the crossing, and its safe use by allotment holders. The site is fenced and locked so the public has no access to the allotments. The Association regularly reminds members of the need to respect the warnings made by train drivers and to observe our safety rules. The crossing has had no accidents during many decades of use.
- 6.1.9 The mitigation measures proposed by Chiltern would provide no remedy for the burden of pushing loads up and down slopes over long distances.

Two witnesses were called in support of this point:

- Mrs Boswell started her allotment in 1997 and has benefitted from the ability to grow her own food, from the exercise and from the comradeship. Going to and from her allotment she often has to carry heavy weights, and her bike is usually laden. The ability to cross the railway during its many train-free minutes has enabled her to keep using the allotment. But when work on the line obliged allotment holders to use the bridge Mrs Boswell found using the bridge, with its many walkers, dogs and pushchairs, very unpleasant and exhausting. She visited her allotment less and less, and considered giving it up. It would be tragic if older members of the Association, who have an important contribution to make, could not continue to use their allotment because the crossing was unnecessarily closed. Mrs Boswell's allotment is the one nearest to the level crossing, and she has seen no "near miss" there. It takes her 12 seconds to cross the railway at the level crossing.
- Dr Lee lives at Cowley, some distance from the site. He has been an allotment holder since 2003, when he started working on plot 113 as one of a group of medical students. He is a member of the Heritage Seed Library. He does not have a garden other than at the Trap Ground and does not foresee a time when he would be able to have one. His time at the allotment is important to him. When he visits he never chooses to walk the extra kilometre that the bridge entails; the level crossing is not unduly dangerous, nor the risks unmanageable and he is always careful when crossing. Although the loads to be carried to and from the allotment are not particularly heavy for a young man, the combination of weight, awkwardness, distance and gradient that using the bridge entails makes the journey daunting. The loads must be reduced, and so more trips would be needed. Time at the allotment is valuable and should be spent there, not trudging over a dog-soiled bridge or (as would be the case with Chiltern's original proposal) driving through a SSSI full of walkers and birdwatchers angered by Dr Lee's motorised presence. The level crossing is exceptional because of geography.

6.1.10 Sight lines at the crossing are excellent. The option suggested by Chiltern in their evidence-in-chief (CRCL/P/6/A, 4.468), which would provide a refuge between the crossing of the existing lines and that of the reinstated line that the Scheme would bring, seems eminently reasonable in this case. The ALCRM risk ranking process is not clear: that risk ranking scores for a double track main line with a third branch line should be the same as a single track line with considerably less rail traffic calls into question the methodology of the assessment and gives the impression that this is not an objective process.

6.1.11 The Scheme would reinstate a railway on land currently used by Association members to park their cars. An alternative parking area would be provided on land currently owned by Oxford City Council (expected to be passed to the County Council as part of the space for use by St Philip and St James School), and access from this car park to the new crossing over the reinstated line would presumably be a relatively easy engineering task. Document Obj13/8 is a drawing that suggests a

layout. Document Obj13/6 is an e-mail from John Griffin, a consultant to Oxfordshire County Council, which says that the County Council would allow its land to be used as part of the car parking layout shown on Obj13/8 if the level crossing is allowed. Such an arrangement would make more land available for the school than would the equivalent Scheme proposal, shown for comparison on document Obj13/7.

- 6.1.12 Chiltern's rebuttal evidence contends that mitigation measures will improve accessibility for allotment holders, but that would not be the case. The proposed level crossing closure is not essential and it is not justified. The existing private crossing is safe and demonstrably safely used.
- 6.2 **Mr Jonathan Clark (Obj 236)**
- 6.2.1 Mr Clark holds an allotment at the Trap Ground Allotments.
- Inconvenience*
- 6.2.2 The allotment access arrangement proposed by Chiltern would be inconvenient. Diversion to the Aristotle Lane bridge would involve a diversion of some 650 metres for the return journey, including crossing a bridge with a height of 5 metres and an average gradient of 1 in 17. The current distance from the car park to the allotments is a level distance of about 30 metres. This would be inconvenient for all allotment holders. Some allotment holders have severe arthritis, multiple sclerosis or have had hip and knee replacement surgery and can use the existing crossing safely (and would be able to use an extra crossing if it were available) but would in most cases be unable to take access via the bridge, or by driving across Port Meadow.
- 6.2.3 A typical errand for a typical allotment holder delivering supplies to the allotment would take (including 3 minutes to drive from home to the car park, and another 3 minutes to drive home again) 18 minutes 47 seconds over the current crossing, 68 minutes and 12 seconds over the bridge or, in the case of a woman able to manage only one sack of compost at a time over the bridge, 93 minutes and 2 seconds.
- 6.2.4 The Order proposes as partial mitigation of this inconvenience that more use is made of the vehicular access across Port Meadow from the Walton Well Road car park. This would do nothing for the great majority of allotment holders to whom this route would not be available and, more importantly, increasing motor traffic across Port Meadow would be an unacceptable solution given its status as a SSSI and as a valued green space.
- Safety*
- 6.2.5 The current crossing at Aristotle Lane crosses three tracks. It is particularly safe, because it is pedestrian-only, it has excellent sight lines, and there is a train speed limit of 90 mph. Since the crossing leads only to a locked gate to the allotments, only allotment holders who know the key code can get anywhere useful via the crossing, and so it is lightly used. Network Rail accepts that there is no history of misuse of the crossing by allotment holders.
- 6.2.6 The Office of Rail Regulation published in April 2010 for consultation the document *Managing Level Crossings: Guide for managers, designers and*

operators (appended to document Obj/236/1). (It was agreed in examination that the ORR's *Policy on level crossings* (CD/3.18) remains current.) The configuration of the track at this point means that the proposed line would be some metres from the existing crossing. There would be space for an arrangement similar to that described by the ORR in paragraph 154 (page 43) of its consultation document:

"Where this type of crossing passes over multiple railway tracks and an interval between tracks exists so that a fenced, safe waiting place can be created for users, the crossing on each side of the interval should be treated as a separate crossing. A chicane may be provided on the crossing to make the position of the safe waiting place clear."

6.2.7 Paragraph 3 (page 11) of the same document says that "ORR encourages innovative solutions to level crossing problems". Such an approach could be made here to include the following:

- a) The crossing would be made private to allotment association members by the use of appropriate gates and locks. This would limit the total number of users to about 250.
- b) Crossing users would be educated in the safe use of the crossing by instructions in the Association's joining pack, guidance on the association website and occasional reminders.
- c) An annual review would be held between local Network Rail management and the Association committee to address any concerns flagged by drivers (or any other railway employee) about the use of the crossing.
- d) Automatic warning equipment should be installed on the two crossings (existing and new). Mr Clark understands that this would be done only when the signalling on the main line to Banbury is upgraded, in about 2015.

6.2.8 Notwithstanding the contention by Chiltern to the contrary (paragraph 3.8 of CRCL/R/Obj236), there is no such regime in place now apart from the reminders issued by the Association (paragraph 6.1.8 refers).

6.2.9 Chiltern argues that a new level crossing should be allowed only in exceptional circumstances. There are exceptional circumstances at Aristotle Lane:

- a) The need for a relatively large population of people of varying physical abilities to have convenient level access to the allotments for the purpose of transporting crops and other goods; and,
- b) Mitigation works to provide alternative access would necessarily require works on the Special Area of Conservation at Port Meadow.

6.3 **Ms Hoonie Feltham** (Obj 317)

6.3.1 Ms Feltham holds an allotment at the Trap Ground Allotments. While pruning an apple tree there in August 2010 she sustained an injury which resulted in her being taken by ambulance to the John Radcliffe Hospital in Oxford. The ambulance was called by Ms Feltham's husband Mr Palmer and it drove to the car park on the eastern side of the level

crossing and the crew used the level crossing to reach Ms Feltham and to assist her to walk to the ambulance. There can be no doubt that if the ambulance crew had had to cross the bridge they would have taken much longer to reach her. And Ms Feltham might not have been able to walk that long distance back to the ambulance. If the injury had been more severe and if Ms Feltham had been alone, the situation would have been much more serious.

6.3.2 If used carefully, the crossing is safe. The difference between the risk of being hit by a train, and the risk of emergency from sudden illness or injury is incomparable. The danger from delayed evacuation and no paramedical treatment is much, much greater.

6.3.3 The bridge is inconvenient for everyday use because its use takes much longer. Ms Feltham has arthritis and is concerned that if the level crossing were closed and if her condition worsened she would find it impossible to visit her allotment.

6.4 **Mr Ian Salisbury** (Obj 5)

6.4.1 Mr Salisbury holds an allotment at the Trap Ground Allotments. He gave evidence in his own right and made closing submissions in that capacity and for the Trap Ground Allotment Association and Mr Jonathan Clark, and they are reported here.

National Policy

6.4.2 The Office of Rail Regulation's policy on level crossings (CD/3.18) says among other things that:

- Except in exceptional circumstances, there should be no new level crossings on any railway; and,
- Rail companies should take all reasonable opportunities to remove or replace existing level crossings or making them safer.

6.4.3 A reasonable course of action will include looking not only at the safety and management priorities of the railway operator but also at the safety, convenience and other matters of concern to those who would be affected by a level crossing closing. The decision to be made is whether or not to extend the existing level crossing with a new section, and national policy clearly intends that such decisions should be made on a reasonable basis. There should be no presumption in favour of closure.

6.4.4 The following considerations should weigh in the balance.

Safety and Management Convenience

6.4.5 Chiltern's evidence is that the railway should be built in "modern form", but that term is not defined and there is no objective explanation of its importance or significance. Modern railways come in many forms but the standards appropriate for the West Coast Main Line or the Channel Tunnel Rail Link cannot be compared with those for the 75 mph Work No. 3. Rather, Chiltern's evidence is designed to fit the management desideratum. Chiltern seeks to eliminate level crossings whenever possible and brought no evidence that it had considered the increased risk to allotment holders due to increased response time by emergency services.

- 6.4.6 Chiltern's assessment underestimated sight distances from the level crossing in both directions and on both sides of the railway:

Evidence of Sighting Distances (metres)		
Side and Direction	Chiltern: CRCL/P/7/E Appendix 2	Allotment holders: Obj5/9
Upside up	556	1000+
Upside down	725	800+
Downside up	540	600+
Downside down	500	500+

- 6.4.7 The maximum permitted speed on the main line at the site is 90 mph. Observation, by an allotment holder using an infra-red speed gun, of 12 trains found speeds between 22 mph and 83 mph. Chiltern's evidence is that the minimum sighting distance required here is 690 metres in cases where trains travel at 90 mph. That is met on the up side of the railway. On the other side, it is Network Rail's failure adequately to cut back trackside vegetation that prevents the 690 metre visibility from being achieved, and Network Rail's duty is to keep the crossing safe. Network Rail wrote on 29 October 2010 saying that the clearance of vegetation here had been added to their work programme. And it is Chiltern's evidence that trains on the new line here would be limited to 75 mph, for which visibility of less than 690 metres would suffice.

The Relative Safety Of The Existing Level Crossing And Its Proposed Extension

- 6.4.8 The Promoter's case on safety is almost entirely based on the comparative risk rankings produced by ALCRM in relation to the wider populations of level crossings controlled by Network Rail. Where objective figures are presented they are incomplete (for example, in that the number of pedestrian level crossings is not stated with a statistic of the number of deaths at such crossings in 10 years, with the result that the risk cannot be established). And it is common ground that a level crossing of the type shown on document Obj5/16 (submitted on 16 December 2010) would comply with HSE guidance.
- 6.4.9 It is relevant to consider the actual risk to users of the level crossing. The RSSB Annual Safety Report 2009/10 (CD/3.26) says at paragraphs 9.2 and 3.3.3 that across the European Union there were 23 fatal and weighted serious injuries at pedestrian level crossings per billion train kilometres – and compared with a billion, 23 is a very small number indeed. Document Obj5/19 is an e-mail from the Office of Rail Regulation which says that 2462 footpath crossings existed on Network Rail's infrastructure at 31 December 2009. During the period from 1999 to 2009 the number of fatal strikes was recorded at an average of 3.2 per year. The likelihood at any one pedestrian level crossing of an incident equates to once every 775 years. And it was agreed for Chiltern at the Inquiry that the chance of a strike at the Aristotle Lane level crossing was variously once in 3250 years, or once in 650 years. It is not surprising that during the 168-year life of the Aristotle Lane crossing there has not been a single collision.

- 6.4.10 No statistician would give such figures precise significance. There is a risk, but it cannot in terms of mathematical probability be distinguished from zero. By way of comparison, during 2007 27036 accidents involving death or serious injury happened on the roads, among which 6924 pedestrians were killed or seriously injured. And during 2008, over 58000 people died of acute heart attack.

The Social, Health and Economic Importance of the Allotment Gardens

- 6.4.11 There is no dispute that the Trap Ground Allotments provide a substantial benefit to the domestic economy of many households, that they provide a good diet for many, and that they provide fitness and enjoyment for the gardeners. Allotment holders' evidence about the operational needs of the allotments, the high productivity of the land in this use, and the social value of the site is unchallenged.
- 6.4.12 Aristotle Lane level crossing is used more frequently than other pedestrian level crossings that the Scheme would close. It cannot be compared to a little-used public footpath used by occasional recreationalists. It provides a vital link between the allotments and the homes of those who keep them.

The Mitigation Scheme

- 6.4.13 Although it has made other suggestions, those are now withdrawn and the Promoter's mitigation scheme is the shared public use of the Aristotle Lane bridleway bridge and the use of the far gate into the allotment site.
- 6.4.14 This does not meet the need allotment holders have for convenient level access when carrying materials and produce. And the Promoter's scurrilous and unsupported suggestion, that anyone fit enough to garden is fit enough to use the bridge, should be rejected.
- 6.4.15 Appendix 13 of document Obj5/2 is an e-mail from the Risk Manager of the South Central Ambulance Service NHS Trust. This compares access options to the allotments in a medical emergency and finds that the level crossing offers the shortest and most direct option, and is to be preferred to either the route over the bridge or that via Walton Well Road car park with its locked gates to Port Meadow. No account of this disadvantage is taken in the Promoter's analysis.
- 6.4.16 The mitigation scheme is not only more inconvenient than the existing arrangement but is also more dangerous. The Promoter is being absurdly cautionary.
- 6.4.17 There is no evidence that the area of the Port Meadow Special Area of Conservation likely to be inundated as a result of the mitigation scheme has been assessed, although the matter was raised in good time. Chiltern's proposal to raise the path from the bridge so as to make the allotments accessible during floods cannot be considered safe. There would be culverts beneath the path but no arrangement has been made to keep those clear and in time they are likely to become blocked and the drainage of the meadow compromised. And the alterations to the eastern ramp, regulating it with tarmac to achieve a gradient of 1:17 would encourage skateboarding and fast cycling – while the bridge is too narrow to accommodate the chicane barriers recommended by the

Highways Agency in such circumstances. The western ramp, at 1:15, would be even steeper, whereas the ideal set out in the Design Manual for Roads and Bridges is that bridge ramps for pedestrians, cyclists and equestrians should not be steeper than 1:20 unless agreed otherwise with the Overseeing Organisation.

Acquired Prescriptive Rights To Foot Access And Car Parking

- 6.4.18 The land shown on the deposited plans as parcel 29002 (the car park) and 29006 (the level crossing) has in living memory been used since at least before 1947 for access on foot to the Allotments, and cars have been parked on 29002 by the allotment holders for the whole of this period. Nobody has ever entered into an agreement for this usage from Network Rail or any of its predecessors. By virtue of section 2 of the Prescription Act 1832, prescriptive rights therefore exist which, in the case of usage for more than 40 years, are absolute and indefeasible.

The Feasibility Of The Extended Level Crossing

- 6.4.19 It has been identified in this evidence that the proposed level crossing over the new line would comply with HSE guidance (6.4.8), that sight lines from the crossing point are generous and greater than indicated by Chiltern (6.4.6) and that Network Rail is to further improve the visibility there (6.4.7). No such concern arises with the new line, for all of those trees and shrubs which currently obscure the proposed path of the new track can be removed.

The Sketch Proposal In Document Obj5/16

- 6.4.20 This drawing shows an arrangement for a pedestrian level crossing of the new line, and a revised arrangement for car parking. It was considered at the Inquiry by Chiltern's engineer. Accepting that the plan was a sketch and would be the subject of detailed scrutiny if it were to be taken forward, it was agreed that the arrangement shown on Obj5/16 was a feasible proposition and could be adapted to require no additional land outside the Order limits.

Collateral Advantages

- 6.4.21 The playing field of the St Philip and St James School is adjacent to the Scheme here. It has a shortfall in playing field space, in the terms of the Education (School Premises) Regulations 1999. The County Council is acquiring land from the City Council to help make up the shortfall. The Scheme proposal would acquire some of that new land for Allotment parking. The arrangement shown on Obj5/16 would take away the need for the Scheme to make such provision on the land the County Council seeks to acquire, and so would help the school to make up its shortfall.

Exceptional Circumstances

- 6.4.22 There is no guidance as to the meaning of "exceptional" in the Office of Rail Regulation's Policy on Level Crossings. The following exceptional matters give good reason to allow the level crossing at Aristotle Lane to be extended across the new track Work No. 3:
- a) The crossing provides safe, close and level access to the allotments for about 250 people engaged in an activity that brings social, economic and health benefits to the community,

which benefits would be imperilled by closure of the crossing. Crossings serving farms and public rights of way do not bring such benefits.

- b) Any safety benefit to be had from closing the crossing is more than offset by the increased risk of acute illness and injury on the allotment gardens arising from closure of the crossing.
- c) The mitigation scheme would be unsatisfactory in the ways identified (6.4.13 to 6.4.17).
- d) Allotment holders have acquired rights of access, to the car park and over the level crossing.
- e) Trains on Work No. 3 would be subject to a speed limit of 75 mph, whereas elsewhere on the line the limit would be 100 mph.
- f) Apart from considerations for the Promoter's management preference of having zero public interface, there is no impediment to retaining the existing level crossing and extending it as shown on the plans submitted by allotment holders.

6.4.23 The Scheme proposal is less safe, less practical, less convenient, more arduous to the elderly, the disabled and the frail, and potentially more hazardous to the Port Meadow SAC natural habitat. It is reasonably safe and practicable to construct an extension to the level crossing with an intermediate safe refuge.

6.5 **Councillor Jean Fooks** (Rep 7)

6.5.1 Cllr Fooks is one of the County Councillors for Summertown and Wolvercote, parts of north Oxford most affected by the Scheme.

6.5.2 The new station at Water Eaton would be a huge benefit for most people, and there should be safe and easy access to the station for cyclists and pedestrians. But residents of Lakeside, Blenheim Drive and Stone Meadow, whose properties back on to the line, would suffer increased noise and possibly vibration. Mitigation measures should be agreed with those people so as to minimise this nuisance. If noise barriers are provided, their visual effect should be considered too.

6.5.3 There is concern about the noise to be expected from freight trains and such traffic should be reduced in the evening and at night. The construction phase is likely to be noisy, and residents should be kept informed.

6.5.4 At Aristotle Lane, many allotment holders are elderly and not very mobile. If the level crossing is closed, an alternative route should be provided which complies with the Disability Discrimination Act.

6.6 **Mr Edward Surridge** (Obj 315)

6.6.1 Mr Surridge is concerned that an appropriate method of noise measurement should be used when assessing the effects of the Scheme. He also drew attention to the effect that lighting associated with the railway might have. When viewed from the countryside during times of low light the contrast of countryside and railway lighting is visually harsh

and detracts from the enjoyment of such views. This can be seen, for example, when viewing Oxford across Port Meadow from Wolvercote West and south of Godstow Lock.

6.7 Mr Peter Claye (Obj 255)

- 6.7.1 The Scheme would result in more trains using the line than at present. Phase 1 would increase the number of trains by a factor of 3, and Phase 2B would bring more. Whereas trains on the line currently travel at about 40 mph, the Scheme would increase their speed to 60 mph for freight and 75 to 100 mph for passenger trains. The noise impact at nearby housing would be intolerable, and so noise mitigation should be provided.
- 6.7.2 Chiltern's noise assessment should be independently checked, but has not been. It is not based on trains of the type that would use the route, and seeks to model the "reasonable worst case" rather than the "actual worst case". The noise thresholds in Chiltern's analysis are wrongly selected in that they are way above the ambient noise level and so would adversely affect residents. The claimed effect of the noise barriers has not been shown to be achievable. For the rest of their lives, residents would be subjected to a three-part impact caused by each 100 mph passing train: a shock wave, a noise build-up and a pressure wave.
- 6.7.3 If the railway was enclosed in a tunnel then train noise would be fully entrapped. Alternatively, a concrete noise barrier 4 metres high set 2 metres from the track, and with sound absorbent material on the track side, would absorb and reflect most of the train noise.
- 6.7.4 The assessment of the vibration effects of the scheme is also lacking. It relies on empirical data from another site, but the train traffic and speeds differ between the two sites and (although clay is present at both sites) the nature of clay varies greatly from place to place. There is no evidence that the clay in the Lakeside area is sufficiently similar to that at Little Sutton for the vibration data to be transferable between the two. In view of the consequent uncertainty, floating slab track should be provided as a matter of course since that is the least intrusive and most effective form of mitigation against train-induced vibration that currently exists.
- 6.7.5 The alternative route to connect the Bicester line with the Birmingham to Oxford line is viable and possible from an engineering aspect. It would cause no problems due to noise, vibration or other environmental impact in north Oxford, and trains could run faster over it. It should be reconsidered.

6.8 Drs Michael Drolet and Rosalind Thomas (Obj 9)

Noise

- 6.8.1 Noise is unwanted sound. By contextualising (in CRCL/P/9/A) noise as conversation or busy office, Chiltern attempt to minimise their responsibility to those who will have to live with noise from the Scheme every day and night, and that is objectionable.
- 6.8.2 ERM assert that daytime noise levels at Wolvercote School would be lower than the Environmental Statement's predicted 59 dB, a mere 4 dB (i.e. just noticeably higher) than the 55 dB threshold value, below which

significant "community disturbance" is not expected. Yet the 55 dB figure exceeds by 20 dB (i.e. 4 times as loud) the current WHO guideline for average classroom noise, which is 35 dB. ERM (for Chiltern) also contend that the Doctors' property at 3 First Turn, 31 metres from the track, would experience less noise or vibration than Wolvercote School but they do not say why.

- 6.8.3 Noise barriers that have been built elsewhere in Oxford (near the Waterside development) afford very little protection against noise. Barriers two metres high would be inadequate; they should be at least three metres tall, they should cover both sides of the track and they should be of concrete, which is the most effective medium for minimising noise.

- 6.8.4 Construction noise would cause significant disruption to the lives of nearby residents and the School.

Vibration

- 6.8.5 Although Chiltern says that vibration levels are currently well within statutory guidelines, the Doctors currently feel vibration when every freight train passes, and their house has suffered some cracking as a result. And residents who lived near the line when it had two tracks recollect that vibration caused structural damage to the First Turn bridge and properties fronting the line. Other examples were to be found at 5 First Turn, Bladon Drive and at St Peter's Road. The lack of a written complaint that can be traced in British Rail's archives does not prove the absence of damage.

Train Speed and Frequency

- 6.8.6 Trains running through north Oxford at 75 mph would cause considerable levels of noise and vibration. They should go more slowly. There is no reason why a service every 32 or 35 minutes (rather than the arbitrary 30-minute service Chiltern proposes) could not be run so as to accommodate a lower speed. And services beginning at 05:30 and ending at 00:30 would have a serious effect on what is now a peaceful neighbourhood.

Other Matters

- 6.8.7 Trees would need to be felled on the cutting sides near First Turn, and that would degrade the outlook from the Doctors' property.
- 6.8.8 The Scheme is likely to reduce the value of 3 First Turn, and Chiltern should compensate owners for loss of property value.

- 6.9 **Engage Oxford** (Obj 297)

Noise

- 6.9.1 The primary determinants of train noise are speed and weight, and for any given set of measures the noise will increase with speed. The impact of train speed on property near the railway is disproportionate to the operational benefits. Trains running between Oxford station and Water Eaton should be limited to 30 mph, even though that would increase the running time by a little less than 3 minutes. The Secretary of State should also have before him evidence regarding the shock effects of two trains passing at speed.

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- 6.9.2 Any permission granted as a result of the Scheme proposal would benefit all future schemes such as East West Rail. Freight trains might become more frequent on the line. Engage Oxford gave evidence that certain operating conditions should be imposed on the line (Obj 297/2 section 2.2) but withdrew that suggestion before submitting their Written Statement to the Round Table Session on Conditions (Obj 297/5).
- 6.9.3 Wolvercote School is next to the railway. Noise abatement that might be suitable for residential areas might not be enough to maintain a classroom environment. Special measures should be taken to ensure noise mitigation for the school, possibly by using cut and cover tunnelling or similar.
- 6.9.4 A benefit of the Scheme would be that the closure of level crossings would reduce the need for whistles. This does not apply to Wolvercot tunnel (which is close to Wolvercote School) and alternative safety measures should be put in place.

Vibration

- 6.9.5 The ground in the Oxford flood plain (through which the Scheme would pass) contains adjacent bands of gravel and clay. Many property owners are familiar with the problems of foundations which sit across the two. The clay bands move and transmit vibration according to their water content. Especially detailed analysis of the track bed and foundations will be needed as conditions change over distances of a few metres. Chiltern has made no specific proposals to address this challenge. The experience of residents who lived close to the railway in the 1960s and early 1970s was that heavy trains used to cause vibration as far as the Woodstock Road: many tens of metres from the track. Without careful construction this could happen again. Once the Order is made and planning permission granted there would be little or no possibility of further measures being put in place to eliminate vibration from the railway. Monitoring systems should be set in place and maintained up to and after the completion of the proposed Phase 2B so that there can be confidence that the mitigation measures have provided the desired results.

Air Quality

- 6.9.6 All trains would be diesel hauled. Air quality at the Wolvercote roundabout already fails to meet WHO limits for air pollutants, and the whole of Oxford is an Air Quality Management Area. Measures should be introduced so that the increase in train frequency does not cause any decrease in air quality. Particular attention should be paid to the Wolvercote School playground.

Road Congestion

- 6.9.7 Chiltern should work closely with the local authorities and bus companies to replace car travel to the railway stations with more and better buses connecting to all parts of Oxford and the surrounding settlements.

Works Near Wolvercote School

- 6.9.8 The proposed works include the temporary closure of the road bridge at First Turn, which is a main access to Wolvercote School for children arriving on foot or by scooter or cycle. The diversion is an extra 500

metres. An alternative footpath should be provided during term time.

Mitigation Generally

- 6.9.9 Engage's concerns are to have legal recourse if mitigation proves to be ineffective, and that residents should have a pre-indication of the expected effect of the mitigated Scheme.

- 6.10 **Mr J C Thorowgood and Ms H M F Chance** (Obj 77)

Noise

- 6.10.1 The Scheme would increase the noise from trains. It should not be necessary for Oxford residents to suffer increased noise from the railway in what is a sensitive residential and environmental area, and it would be unreasonable for public transport to spoil the quality of the environment in the community that it is to serve. Train speeds should be limited by condition to 30 mph between Oxford station and Water Eaton station, a measure that would add only about 4 or 5 minutes to the overall journey while allowing a more peaceful life to thousands of Oxford residents. And freight operations should be restricted at night to prevent households from being woken.

Vibration

- 6.10.2 Long-term local residents say that heavy trains on the line used to cause vibration as far as the Woodstock Road. Chiltern give assurances that modern methods of track-laying would minimise any vibration but there is no way of knowing that this is true.

Other Matters

- 6.10.3 Mr Thorowgood and Ms Chance reiterated evidence put by Engage Oxford with regard to air quality (6.9.6) and road congestion (6.9.7).

- 6.11 **Quadrangle Management Limited** (Obj 14)

Introduction

- 6.11.1 Quadrangle Management Limited is a private, self-governing, non profit making Company and freehold owner of Quadrangle House in St Peter's Road, Upper Wolvercote.
- 6.11.2 Quadrangle House is a non-monolithic, inter-connected block, up to three stories high, of 16 self-contained flats, seven of which are currently let. It stands about ten metres from the current position of the nearest rail of the Oxford to Bicester line. It directly borders Network Rail land and is the nearest property to the line; it would be impossible to get any closer. There is a car park in the basement. Most of the flats already have double glazing.

Current Conditions

- 6.11.3 The main problem faced by residents of Quadrangle House is excessive and dangerous vibration from heavy freight trains. This results principally from two factors: train speed and axle weight. Axle weight compresses the subsoil beneath the track bed and the compression wave travels at the speed of the train. The resulting vertical movements of the building are proportional to the compression. Horizontal movement is provided by the impulse from the compression wave, and can be

magnified by building height. Resonance may be set up and can cause excessive structural failure.

- 6.11.4 Vibration from passing heavy trains has caused differential, and excessive, subsidence. For a period during the 1970s, very heavy Amey Roadstone trains – of some 3000 tonnes total weight – cause significant structural damage to Quadrangle House. The differential subsidence of the part of the building nearest the line (subsidence relative to the part furthest from the line) caused the “backbone” of the building to break and the building to shift slightly on its foundations. This led to widespread cracking throughout the building. Over the years, repairs have cost over £100,000 and are still not complete. A note of a meeting of the Quadrangle Housing Society Limited (the original owner of the building) on 12 March 1975 reports that:

The cracks in the structure, particularly the car park brick piers, have been inspected twice by structural engineers and the view is that the cracking was an initial once-for-all movement that is not worsening.

- 6.11.5 Many line-side properties in the area have suffered similar structural damage, in proportion to their distance from the track. Similar damage can be seen at First Turn bridge. The line speed during the 1970s was 40 mph. By October 1975 a new continuous welded track was laid and the line had been reduced to single track. But it was not until Amey Roadstone stopped their heavy stone trains that excessive and worrying levels of vibration stopped; although vibration continues to be felt to a lesser degree.

- 6.11.6 The current line speed near Quadrangle House is 30 mph. Passenger trains currently cause no nuisance whatsoever. Existing freight trains vibrate the building but appear not to cause any further damage.

Objection: Vibration

- 6.11.7 The Scheme would move the line nearer to Quadrangle House, increase the line speed, and increase the frequency and the length of trains. These changes would increase the degree of vibration at Quadrangle House, and the number of periods of vibration, and the duration of each vibration period. Without significant mitigation, the safety of the structure – and its occupants – would be at serious risk.

- 6.11.8 Therefore, the line speed between Oxford North Junction and Wolvercot Tunnel should be limited by condition, for freight to 30 mph and for passenger trains to 50 mph. This would keep vibration at Quadrangle House and other lineside properties to acceptable, non-damaging levels.

- 6.11.9 To guard against possible increases in train axle weights in the future, the track near Quadrangle House should be fitted with whatever devices and resilient track forms are available. And, so that the effect of the Scheme can be evaluated, maximum levels of vibrations at Quadrangle House should be measured now and for a satisfactory period after the Scheme is implemented.

Objections: Other Matters

- 6.11.10 Quadrangle House residents would also suffer from increased noise. Reduced line speeds would counter that. An acoustic fence would not be effective because the bedrooms of the flats that overlook the line are at

first and second floor level, and an acoustic fence of corresponding height would block out the light. Perhaps a line of small trees or shrubs planted close to Quadrangle House would help in this respect. Reduced train speeds would also cut noxious emissions from the trains.

Records of Vibration

- 6.11.11 Chiltern report in their letter dated 28 June 2010 that they have been unable to find any record of complaints of damage caused by vibration from trains, and ask whether the Company has any. The damage predates the Company and the organisations responsible for Quadrangle House at the time have long since ceased to exist. The minute of the Housing Society meeting on 12 March 1975 records the intention to approach British Rail concerning vibration from fast heavy trains, and the 16 October 1975 minute records that a new continuous welded track had been laid.

6.12 **Ms Nicola Blackwood MP (Obj 312)**

- 6.12.1 Ms Blackwood is the Member of Parliament for Oxford West and Abingdon. The Scheme would run through several residential areas of her constituency. Many concerned constituents have made representations to her, saying that their properties are already affected by high levels of noise and pollution from the railway as well as by nearby roads. They are concerned that the proposed double track and the more frequent and faster trains would worsen their living conditions; and that the Scheme would worsen local traffic levels, especially around the A40/A34/M40 interchange.

Noise

- 6.12.2 Constituents have these concerns:
- That the Scheme would lead to an increase in freight traffic on the line. Since Chiltern has said it is not responsible for the line's freight traffic, Chiltern's estimation of freight traffic, and its effects on noise and air pollution, might be too low.
 - Trains should be slowed to 40 mph while passing residential areas such as Wolvercote and Summertown. The Scheme would stringently limit speeds near other residential areas, near Oxford station and near the Bicester Chord, and the same should be done here.
 - They do not believe Chiltern's assurances that the Scheme would not affect noise levels. Further testing is needed. And even if Chiltern's predictions of noise levels were accurate, they might have serious health implications for local residents and schools. Every option available should be used to reduce noise levels, including slower trains and adding noise barriers.

Lakeside

- 6.12.3 Some Lakeside residents remember freight traffic, on the line when the M40 was being built, causing houses to vibrate and disturbing sleep. These residents are also concerned about the dangers of train derailment: some houses are within 8 metres of the line and the track is above ground level.
- 6.12.4 To mitigate the pollution, noise and danger, Chiltern should provide

robust costing and analysis of providing a full or half tunnel along this specific stretch of rail line, as is common in some European countries.

Road Traffic

- 6.12.5 Constituents believe that the Scheme proposals for changes to the road layout around the new Water Eaton station should be independently scrutinised, to provide assurance that they would function as expected.

Air Quality

- 6.12.6 Notwithstanding Chiltern's evidence to the contrary, residents remain concerned that diesel particulates and other pollutants arising from use of the Scheme may, in fact, have a negative impact locally.

Aristotle Lane Allotments

- 6.12.7 Ms Blackwood has been contacted by the Trap Ground Allotment Association, whose evidence to the Inquiry I have previously reported (Sections 6.1 and 6.4).
- 6.12.8 The Scheme should not make it more difficult for local residents to access the allotments.

Noise And Vibration Mitigation Policy

- 6.12.9 Document CD/1.29 sets out Chiltern's Policy as issued to the Inquiry when it opened and was current when Ms Blackwood gave her evidence. Subsequent revisions by the Promoter brought it to CD/1.29/2 by the end of the Inquiry.
- 6.12.10 In the Policy (CD/1.29):
- The Code of Construction Practice, mentioned in paragraph 1.5, should be the subject of public consultation.
 - The proposed vibration dose value change threshold of 100% (paragraph 2.11) is too high.
 - The monitoring scheme (paragraph 2.12) should be applied individually to each property affected by the scheme
 - Specific proposals should be made in respect of vibration mitigation.

- 6.13 **Dr & Mrs Stephen Young (Obj 95)**

Noise

- 6.13.1 Experience gained from two visits to places close to high speed rail lines leads Dr and Mrs Young to be surprised that Chiltern should suggest that very few houses (only 12 locations in total) would qualify for noise insulation. This is a totally inadequate provision. And the removal of trees near Wolvercot Tunnel would only serve to increase the noise levels there; and so should be minimised.

Construction

- 6.13.2 24-hour construction work is proposed at Wolvercot Tunnel. Mitigation measures are likely to be needed to alleviate disturbance from noise, vibration and light pollution. Engage Oxford should be involved in agreeing any proposed noise mitigation, since the City Council's concern for residents cannot be relied upon.

Vibration

- 6.13.3 Many of the houses in North Oxford are built on clay which transmits vibrations very efficiently. The internal doors at 398 Woodstock Road rattle in their frames when heavy freight trains pass and one can feel the vibration through the floor. To dramatically increase the volume of freight trains on the line would increase vibration and risk damage to the property.

Air Quality

- 6.13.4 The new station at Water Eaton would increase road traffic in the area near Wolvercot Tunnel. That and the increase in diesel pollution from trains are likely to cause levels of pollution above the WHO guidelines.

6.14 **Ms Sushila Dhall** (Obj 235)

- 6.14.1 Ms Dhall lives at Stable Close, Rewley Park.

Noise and Vibration

- 6.14.2 Currently, there are times when Ms Dhall's property is not disturbed by trains passing through nearby Oxford station. But a few times each day trains stand idling outside the main part of the station, and that causes high levels of vibration and noise in Ms Dhall's garden and house. The Scheme proposal would increase the number of trains and change the pattern of use so that trains would stand even nearer to Ms Dhall's property than they do now, and so the disturbance there would increase. And it would be wrong to claim that because noise levels are already high around the property, more noise would make no difference.
- 6.14.3 Chiltern aims to limit vibration to a level at which "adverse comments are possible". This assumes too high a tolerance of vibration. Those who make adverse comments would be doing so because their quality of life would have been adversely affected.

Other Matters

- 6.14.4 Ms Dhall is not satisfied that the Scheme would give rise to no loss of light at her property.
- 6.15 **Harry and Reneth Schoetz** (Obj 232)
- 6.15.1 Mr and Mrs Schoetz live at Stable Close. Their home is next to the current staff car park at Oxford Station. The Scheme proposal could lead to an hourly number of 35 or more vehicles visiting the car park next to their home to drop off or pick up passengers, whereas currently some 5 vehicles per hour either enter or leave the current car park. This would result in a higher level of noise and fuel pollution. Further such pollution is likely to arise from the extra trains that the Scheme would bring. A noise barrier at least 2.5 metres high between the new station building and the northern end of the car park would significantly reduce the impact of noises from trains, plant and passengers as well as pollution to the properties in Stable Close.
- 6.15.2 Mr Schoetz explained in examination that in deciding to live next door to a station car park, he took advice from his surveyor that the local planning authority would ensure no harm befell his property as a result of activity at the station. The Scheme should protect its neighbours, and

a small change would make the Scheme acceptable to him.

6.16 **Dr Rob Hope** (Obj 179)

6.16.1 Dr Hope gave his evidence in chief at the Inquiry. Before any examination took place he then agreed to discuss with Chiltern the matters he had raised, outside the Inquiry, and to tell the Programme Officer if he subsequently wanted to return to the Inquiry to pursue his case. Dr Hope did not return, and I therefore report his evidence as a written representation (6.55.42).

6.17 **Councillor Michael Gotch** (Obj 61)

6.17.1 Councillor Gotch is a member of Oxford City Council for Wolvercote, and appeared in that capacity and as a resident of First Turn.

6.17.2 Many Wolvercote residents welcome, in principle, the improved rail service to Bicester, and the new service to Marylebone, and the new station at Water Eaton. But major reservations have been expressed with regard to noise, vibration, possible structural damage, and nuisance caused by more frequent, heavier and faster passenger and freight trains running 24 hours a day, 7 days a week.

6.17.3 Therefore:

- a) Between Water Eaton and south of Blenheim Drive, freight trains should be limited to 40 mph and passenger trains to 50 mph;
- b) Passenger train frequencies along the line (total on all routes taken together) should not exceed 5 trains per hour each way, running only between 0600 and 2300 and none at other times;
- c) Not more than 1 freight train should use the route, in each direction, in any hour;
- d) Between Lakeside and Blenheim Drive (and at Stone Meadow), the track should be of the highest possible standard, to minimise vibration, noise and nuisance to residents and the Wolvercote Primary School and St Philip and St James's School;
- e) Between Lakeside and Blenheim Drive, buildings gardens and school playgrounds that are close to, or lower than, the track should be protected from excessive vibration and from noise and nuisance by specially designed measures;
- f) A baseline structural survey should be carried out by Chiltern of buildings considered to be fragile or at risk of damage by vibration;
- g) All construction works to be carried out efficiently with minimum disruption to users and residents;
- h) Construction of Water Eaton station should be conditional upon the local highway authority agreeing the proposed access arrangements; and,
- i) Major variations to the Scheme, once it has been approved, should be the subject of widespread consultation with the

Comment [RJF2]: checked against OBJ/061/1

authorities and the community and a further Inquiry if objections are received.

6.18 **Ms Maureen Rosenberg** (Obj 143)

6.18.1 Ms Rosenberg is a professional piano teacher in practice at her home at 45 Lakeside for some 20 years and teaching some 60 students a week. Her studio is at the back of her house and is about 20 metres from the line. External noise comes from two sources: the A34 road (a constant drone) and the railway. Currently, freight train noise is particularly intrusive and (although double glazing is fitted in the house) teaching must pause until the train has gone. Freight trains are infrequent and so more of an inconvenience than anything else. The current passenger trains are infrequent, have only two carriages and travel at only 30 mph.

6.18.2 The Scheme would bring about a change of circumstance in that the line would carry passenger trains that are faster, longer, heavier and more frequent than at present and each would destroy the working environment in the studio. And there would be likely to be more freight trains each of which could be heavier than those that pass now. Teaching conditions in the studio would deteriorate below a level that is professional or even satisfactory. Ms Rosenberg would be forced to relocate, either to rent premises in north Oxford (but the cost of that option precludes it) or to extend her house at the front to form a soundproofed studio there.

6.18.3 The railway near Lakeside already has welded rails. Chiltern contend that a 2-metre high noise barrier would allow current noise levels to be maintained, but the railway line is above the 2-metre high fence at the end of the garden and Ms Rosenberg does not understand how the noise level can be unchanged with such an increase in traffic on the railway.

6.18.4 Conditions at 37 Lakeside, where Chiltern have taken noise measurements, are not relevant to Ms Rosenberg's case because her house is closer to the line than is number 37, and because her concern is about peak sound levels and how often they occur whereas the reported measurements from number 37 were average noise levels.

6.19 **Professor Alexander M Korsunsky** (Obj 295)

Introduction

6.19.1 Professor Korsunsky is Professor of Engineering Science at Oxford, a chartered physicist and engineer, a member of the Editorial Board of the Journal of Strain Analysis published by the Institution of Mechanical Engineers, and a member of the Institute of Physics. He is a consultant to Rolls-Royce plc. He has published 170 articles in peer-reviewed international journals on a variety of issues relating to fracture and strength of materials, stress and vibration, including in railway components. The Oxford to Bicester railway runs at the bottom of his garden at Lakeside, with continuous welded track.

6.19.2 The houses in Lakeside were built in the mid 1960s. At that time the entire railway network was contracting and in 1967 the Oxford to Bicester line was closed to passenger trains. The expansion of the railway that the Scheme proposes would result in profound and lasting impact on dwellings near the track. Measures put in place should be

based on logical and equitable principles.

- 6.19.3 In the past in the UK, noise from railways has often been dealt with on the basis of a "we were here first" approach on the part of the rail operators. In the present case the houses were built when the present reduced rail traffic was already in place and was expected to reduce to nothing in due course. The onus is now on the Promoter to ensure that the level of environmental impact (noise and vibration) does not increase compared with the present level.
- 6.19.4 This is consistent with the spirit of new EU legislation and the associated requirement that rail developments and installations do not result in the increase of noise and/or vibration above the existing level (see "*Reducing Railway Noise Levels – The Impact Of Forthcoming European Legislation*"; Watson, R and Sohail, M). Chiltern Railways is a subsidiary of Deutsche Bundesbahn, a German company. The practical noise limits for transportation currently allowed in the UK are significantly higher than the limits in other European countries, notably in Germany. The UK Government will come under pressure to bring its action plans for noise reduction measures into line with other member states. It would be perverse to allow a subsidiary of a German company to put in place a scheme that the promoter expects would increase noise and vibration.
- 6.19.5 Chiltern should be able to demonstrate their readiness and ability to maintain the present low levels of noise and vibration through technical measures implemented at the time of construction. But correspondence from Chiltern to Professor Korsunsky shows that neither they nor their consultant possess sufficient knowledge of the levels of vibration, noise, soil quality and the like; as is evident from expressions such as "At this stage in the design, detailed ground investigations have not yet been undertaken" and "The approach ... used and the level of detail to which it has gone is entirely consistent with our knowledge of the likely vibration effects of a new railway ...". This is insufficient to form a convincing and reliable picture.
- 6.19.6 The proposed project should not go ahead in its current form because:
- a) The Scheme does not address adequately the issues of vibration and noise; and
 - b) The promoter failed to comply with the statutory consultation process, and the Freedom of Information Act 2000.

Vibration

- 6.19.7 The combination of the vibration induced by the rail traffic and the properties of North Oxford clay soil means that structural damage is likely, particularly to properties immediately adjacent to the line. The only two houses in Lakeside that have needed underpinning are the two lying closest to the track. (Work was carried out at one of those in 1995.) Any increase in the level of noise and vibration is certain to increase the adverse impact on the buildings at Lakeside.
- 6.19.8 Unlike noise, vibration cannot be shielded or abated by retro-fitting mitigation measures to existing track. Such issues must be addressed at the stage of track upgrading, at the level of ballast and vibration isolation installation.

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- 6.19.9 The comparison of the ground conditions at Lakeside with those at Kings Sutton is neither helpful nor appropriate here. The properties of Oxford Clay are well researched, and its propensity to "heave" and to subsidence is documented. Vibration, even at relatively low levels (e.g. beyond the ten-metre distance from the track) modifies the moisture uptake and release processes sufficiently to lead to long term settlement which can cause very significant loss of building stability and damage to property.
- 6.19.10 The published research paper "*Calculation Of Low-Frequency Ground Vibrations From Railway Trains*" (Krylov V and Ferguson C, appended to document Obj/295/5) demonstrates that the ground vibration spectra produced by passing railway trains "depend strongly on the mechanical properties of soil, on the axle loads of the carriages and on the geometrical parameters of the track and train." The paper describes the effect of the pressure of wheel axles onto the track-soil system, which pressure is described as quasi-static. Chiltern have neither accounted for any of the effects of complex train-track-soil interaction, nor carried out additional investigations due to the complex nature of local soil and landscape (for example, the elevated position of the track at Lakeside), nor carried out measurements at multiple distances from the track. Therefore, the assessment of consequences (in terms of vibration and noise) of the Scheme including any mitigation must:
- Be performance-based;
 - Involve transparent, independent and quantifiable measurements of noise and vibration; and
 - Rely on the comparison of vibration levels before and after the Scheme.
- 6.19.11 Annex A of BS 6472 Part 1 (*Guide To Evaluation Of Human Exposure To Vibration In Buildings: Vibration Sources Other Than Blasting*) (CD/5.26) suggests that it should be a conscious objective when preparing a vibration assessment report that sufficient information is provided to enable an experienced investigator to confirm the findings. The Promoter has consistently refused to do that. The Environmental Statement is misleading and inadequate in that respect.
- Noise**
- 6.19.12 The mitigation measures discussed by the Promoter are inadequate at reducing the negative health impact of the intermittent noise of faster trains. The Scheme would lead to a substantial and lasting increase in the noise impact on residents. The noise would become more frequent, abrupt and intrusive than at present, and would occur more often at night.
- 6.19.13 The only acceptable way to deal with noise and vibration associated with the Scheme would be to combine two measures:
- Lower the track, to reduce noise and vibration; and,
 - Place a tunnel over the line between Wolvercot Tunnel and North Oxford golf course.
- Disclosure of Information**
- 6.19.14 By letter dated 5 May 2010 the following information was requested of
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Chiltern:

- Proposed measures to mitigate vibration;
- Investigation of the acoustic effects of the Scheme;
- Details of measures to mitigate noise;
- Assessment of the effects of increased train speed on noise and vibration; and,
- Before and after estimates on noise and vibration levels.

6.19.15 No satisfactory reply has been received.

6.20 **Dr Caroline Robertson** (Obj 234)

6.20.1 The Scheme should not go ahead, because:

- The decision-making process is unfair;
- The environmental impacts of the Scheme have not been properly assessed and the proposed mitigation is inadequate; and,
- The project is not supported by the business case.

Process

6.20.2 Chiltern gives the impression that the Scheme will proceed regardless of objections. Objectors were not so well-represented at the Inquiry as was the Promoter. The Promoter's documents are littered with mistakes and misleading information, and they refer to other documents that are inaccessible (for example, on 30 March 2010 Chiltern's consultant wrote that The Oxford and Bletchley Junction Railway Act 1846 (CD/5.1) was not available from them). They include many unsupported statements and conclusions. Guidelines are used as rigid rules when it benefits Chiltern. A public exhibition organised by Chiltern was not properly publicised (to residents of Blenheim Drive, Bladon Close, Woodstock Road, Carey Close and Lakeside) but when told of this Chiltern organised no further public exhibition. The Promoter's documents cost many hundreds of pounds to buy and were no longer on public display when Dr Robertson was preparing her Statement of Case; a compact disc with the document files on it, provided to Dr Robertson on request, did not include an Addendum to the Environmental Statement that should have been provided.

6.20.3 It is not clear who protects the interests of the public and ensures that the process is being conducted fairly and even-handedly.

Environmental Impact: Noise

6.20.4 The background road noise levels for the Wolvercote and Lakeside areas are, according to road noise maps on the DEFRA website, much higher either than those measured by Chiltern's consultant or than the World Health Organisation's maximum recommended community noise levels.

6.20.5 When considering disturbance from trains, it makes common sense to consider the maximum noise of a train as it passes rather than an artificial average over time. At any given time the noise from a train is either zero (if no train is present), or between zero and 80 dB (train approaching or leaving), or over 80 dB (train passing). Sustained noise

levels above 75-80 dB cause physical damage to the ear, according to the *WHO Guidelines for Community Noise 1999* (document Obj/234/2 Appendix 9). The Scheme would introduce more frequent and faster trains, resulting in a proportionate increase in the number of times the noise peaks in the area.

- 6.20.6 The railway line is approximately 20 metres from Lakeside houses and sits on an embankment. When in her garden, Dr Robertson is startled by passing trains, the noise of which prevent conversation there. Trains are restricted to 30 mph and are infrequent. Occasional early morning freight trains wake Lakeside residents. The proximity of the line to the houses makes noise and vibration a problem. Chiltern's proposed fence-type barrier will not offset the increased noise and vibration of its scheme; line-side mitigation would be more effective.
- 6.20.7 Chiltern has based its application on what it can get away with under current legislation, with scant regard for the true impact of more trains. The statutory night-time period from midnight to 0600 is much less than most people need, and children and babies need very much more. Using such a short night-time period artificially decreases the day-time average noise levels by including the off-peak evening hours.
- 6.20.8 Chiltern's assessment of the noise impact of the Scheme refers to draft guidelines from the Institute of Environmental Management and Assessment ("IEMA"), which are that the levels at which environmental noise starts to annoy the general public are 55 dB during the daytime and 45 dB at night. Three years before IEMA published its guidelines, the World Health Organisation published guidelines that use the same noise levels as the maximum recommended community noise levels. If any proposed scheme has predicted noise levels above the WHO levels, then mitigation should be used.
- 6.20.9 Planning Policy Guidance 24 *Planning and Noise* refers (CD/3.4, Annex 3 paragraph 9) to BS 8233:1987 for guidance on acceptable levels of noise within buildings for new developments. BS 8233:1999 (*Sound Insulation And Noise Reduction For Buildings: Code Of Practice*) replaced the 1987 edition and incorporated significant amendments. The criteria suggested for inside dwellings are:

	Typical Situations	Design Range	
		Good	Reasonable
Reasonable Resting/Sleeping Conditions	Living Rooms	30	40
	Bedrooms	30	35
* For a reasonable standard in bedrooms at night, individual noise events (measured with Fast time-weighting) should not normally exceed 45 dB L_{Amax}			
Indoor Ambient Noise Levels In Spaces When They Are Unoccupied $L_{Aeq,T}$			

- 6.20.10 Guidance for outside areas, such as parks, private gardens and balconies is for a "desirable" level of 50 dB $L_{Aeq,T}$ and an upper limit of 55 dB $L_{Aeq,T}$. The time period for assessment should be 16 hours for daytime (living rooms), 8 hours for night-time (bedrooms) and for a good sleep individual noise events should not exceed 45 dB L_{Amax} . The approach

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- taken by BS 8233:1999 is consistent with Oxford City Council's noise policy for new developments. In the case of Crossrail, both underground and overground sections, an increase in noise of more than 3 dB is classified as a "significant negative impact" and 40 dB $L_{Amax,s}$ in residential buildings and 30 dB $L_{Amax,s}$ in studios are considered the appropriate levels (Obj/234/10, references in footnote 9 page 2).
- 6.20.11 Noise measurements made for Chiltern are inaccurate, unrepresentative and misleading. Data are used selectively. Measurements were taken at times of bad weather, contrary to the requirements of *Calculation of Railway Noise 1995* (CD/5.12), and at the start of the school holidays, reducing traffic levels on the A34 and noise levels from it.
- 6.20.12 Chiltern's interpretation of train timetables, needed to correlate recorded noise events to passing trains, is unreliable. When a conflict is found between a real measurement and a database, the database prevails, unchecked by Chiltern. This casts doubt on Chiltern's consultant's ability to correctly interpret vibration and noise measurements. The application should be turned down on the basis of an inadequate environmental statement.
- 6.20.13 BS 6472-1:2008 *Guide To Evaluation Of Human Exposure To Vibration In Buildings* refers to structure-borne noise that may arise from the vibration of building structures and says that the "A" weighted scale should be adjusted to allow for this (CD/5.26, 3.6.2). Chiltern agree that trains produce vibration but use the "A" weighted scale without adjustment: the noise measured will be lower than the actual noise that people hear.
- 6.20.14 As Phase 2A is planned to be implemented concurrently with Phase 1 and enables enhanced freight capability to carry shipping containers, it is wrong to use Phase 1 data only, which gives the maximum noise of a passing train to be 81 dB; Phase 2 data should be used, which gives the maximum noise of a passing train as 85 dB. Since passenger trains would not travel faster after Phase 2, the only conclusion must be that enhanced freight capability increases the maximum noise level. But Chiltern does not provide predicted train noise levels after completion of Phases 1 and 2A. Therefore, for virtually all properties within 30 metres of the line, the impact would be significant. After completion of Phase 1 the time averaged noise level would always be above the WHO maximum recommended community noise levels, and at any time day and night there could be a train passing at 82 dB or more.
- 6.20.15 If trains in the future could accelerate and decelerate faster than today, trains could be travelling at line speed (100 mph) as they pass Lakeside, and noise would increase beyond the current estimates.
- 6.20.16 If the Oxford to Bletchley line were reopened then container traffic between Southampton and the West Coast Main Line would become possible. East West Rail does not need to be completed for this to become a reality. Therefore, it is likely that the predicted freight traffic could be a serious underestimate. Freight trains on the route are already longer than the typical 15 wagons used in the Environmental Statement assessment (CD/1.18, D5.3.3). There will inevitably be an increase in the number of freight trains, even in the absence of Phase 2, in line with
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Network Rail policy. Chiltern should have predicted some increase in freight use of the line after Phase 1; perhaps a 60% increase in the next 15 years. And rail traffic on the new route might increase during disruption on the Great Western main line (Reading remodelling, Cross Rail construction and Oxford re-signalling).

- 6.20.17 Neither noise calculations nor sufficient information to allow a check of Chiltern's results have been provided. Noise level predictions advanced by the promoter are shown in the following table:

	Predicted train noise dB		Train + ambient dB		Noise change dB		Impact	Max Noise dB
	Day	Night	Day	Night	Day	Night		
CD/1.16, table 6.12, phase 1	59 (16h)	54 (8h)	59 (16h)	54 (8h)	2	4	6 dB, subst*	81
CD/1.16, table 6.14, phase 2			63 (18h)	60 (6h)				
CD/1.16, table 6.13, phase 2	63 (16h)	61 (8h)	64 (16h)	61 (8h)	7	12	12 dB, high	85
CRCL/P9B, Annex 2 Table 2.1 Phase 2	63	62	63	62	9	12	12 dB, high	
CRCL/P9A, Table 11, Phase 2			63	60				
CRCL/R/Obj234 letter 29/10/10 Table 1			60	59	7	9		
CRCL/P9B, Annex 2 Table 2.2 Phase 2 with mitigation	50 (16h)	50 (8h)	54	52	0	2	2 dB slight	
CRCL/R/Obj234 letter 29/10/10 Table 1 with mitigation					0	0		
Predicted train noise, impact at Lakeside and effect of mitigation								
* subst = substantial								

- 6.20.18 This table shows discrepancies between predicted values and conclusions, and gives some idea of the errors in these numbers and that 1 dB is within the error level. The predicted train noise takes into account inherent mitigation measures such as upgraded track and trains (CD/1.16, page 6-31). The effect of mitigation provided by Chiltern refers to a 2 metres high barrier (CRCL/CR/OBJ/234/A, answer 28). The effect of this is stated to reduce the predicted train noise by 13 dB, although the *Position Paper On The European Strategies And Priorities For Railway Noise Abatement* (Obj/234/2, annex 1, para 1.7.3) says that typical noise reductions are up to 10 dB depending on the barrier height, distance to source and receiver and barrier absorption.

- 6.20.19 Draft TAG Unit 3.3.2 *The Noise Sub-objective* is appended to document Obj/234/10. Chiltern has not followed the guidance of the Unit in that:
- Noise effects of the Scheme have not been monetised;
 - The noise threshold of 45 dB $L_{Aeq,18h}$ recommended by the Unit has not been used;
 - Noise levels have not been estimated for all residential properties within 600 metres of the Scheme.
- 6.20.20 The Noise and Vibration Mitigation Policy (CD/1.29) is deficient in various ways:
- Many statements are too non-committal to be legally binding;
 - If people are unhappy with the noise levels after the start of train services, they would have to wait at least 18 months for two surveys to be conducted and analysed (paragraph 2.2); and,
 - It is wrong to concentrate on time-averaged noise levels, because people are more bothered by the noise level of a train passing.

Environmental Impact: Air Quality

- 6.20.21 Oxford is an Air Quality Management Area.
- 6.20.22 Prior to document CRCL/INQ56, there was no mention in the Environmental Statement or elsewhere in Chiltern's case of any AQMAs. CRCL/INQ/56 says there is no current measurement by Oxford City Council of pollution concentrations in Wolvercote. Document Obj/234/7 presents an extract from the City Council's *Local Air Quality Management, Progress Report And Detailed Assessment May 2008* which shows the results of diffusion tube monitoring at Wolvercote roundabout.
- 6.20.23 The Environmental Statement is inadequate and the application should be rejected.

The Business Case

- 6.20.24 Phase 1 of the Scheme is being financed by Network Rail and paid back through fare revenue. If it is unsuccessful, the taxpayer would meet the cost through subsidies provided to Network Rail. Chiltern requires the subsidy from Oxfordshire County Council before Chiltern takes over from First Great Western the existing "enhanced" passenger service to Bicester (CRCL/P/2/A, 9.2.3).
- 6.20.25 Phase 2A would be funded by the Department for Transport at a time of scarce resources. The business case should be transparent, easy to understand and absolutely compelling. But:
- Chiltern over estimates the future demand for rail travel. There is no evidence of the cause of the increase in passenger numbers. To justify public money being given to train operators we should try to correlate employment data trends with passenger journeys.
 - Chiltern incorrectly interprets the Oxford to London market share of rail. Table 2 of CRCL/P/2/A shows Chiltern's comparison. Cambridge and Milton Keynes are closer to London than Oxford is, and Cambridge trains arrive at Kings Cross which is within walking distance of the City and which gives better Underground access than either Paddington,

Euston (for Milton Keynes) or Marylebone. And Oxford is well connected to London by coach.

- Water Eaton Parkway is poorly located. Some 2 miles from parts of Wolvercote and Kidlington, it is too far for pedestrian or cycle access en route to a working day in London. Due to horrendous traffic congestion on the A40, A44 and A34 roads, car access to stations at Bicester would be more convenient.
- Wider societal benefits associated with passenger fatalities, and carbon dioxide emissions, are overstated.
- User benefits of £222.3 million (CRCL/P/5/A, 4.11) are pure speculation. Once Crossrail is complete, Marylebone will be less well placed than Paddington for onward travel in London. To put a value on journey time saved by workers is ridiculous.
- Non-user benefits are pure speculation. Alleviating congestion is valued at £116.3 million by Chiltern but that is wrong for the following reasons. Most users would still drive to the station to catch the train. Passengers who live to the west of Oxford will drive further than they do now to reach a station. To offset the effect of the extra car journeys to Water Eaton station would require a 500% increase in rail commutes from Bicester to Oxford, transferred from the road. The expected decrease in road accidents might be negated by a high-speed rail accident. Air quality improvements would arise from improved vehicle technology, not from the Scheme. The Scheme would not improve noise levels because more development, cars, buses and trains would not decrease noise levels. No justification is given for the £0.5 million pounds Chiltern presents as associated with reduced greenhouse gases.

- 6.20.26 The Scheme is not essential and the money would benefit far more people by upgrading the existing Great Western main line and trains.

Vibration

- 6.20.27 The measured vibration levels of trains at King's Sutton, reported in table D5.6 of the Environmental Statement (CD/1.18) are meaningless. For example, for the same type of train 5 metres from the track (Class 220 "Voyager" DMU), the measured vibration level varied by 60% and more than the measured freight train. Chiltern say that Class 168 DMUs and Class 67 locomotives would be used but the vibration of Class 67 locomotives has not been measured.

- 6.20.28 Annex B of document CRCL/INQ/45 sets out the results of vibration measurement at 55 Lakeside. There is no explanation of how the reported vibration dose values were derived from the measured results, nor is the graphical information presented to a meaningful scale. The format and content of a vibration assessment report suggested in Annex A to BS6472 (6.19.11) is not used. Chiltern's inability to provide sufficient information to enable an experienced investigator to confirm their findings reinforces the view that the application should be turned down on the basis of an inadequate environmental statement.

Safety

- 6.20.29 The Secretary of State should consider imposing on Chiltern (but not

Network Rail or anyone else) and its successors, an obligation to compensate Network Rail and any future franchisees against all costs, liabilities etc resulting from a derailment where third-party harm occurs.

Human Rights Act 1998

6.20.30 Environmental issues such as noise and air pollution fall within the ambit of Article 8. There must be good reason for interference with that Right, and the interference must be no more than is necessary. Therefore, if there are less intrusive ways of achieving the same aim they should be used. Such alternative measures do exist and should be pursued:

- The Scheme could connect with the Great Western line north of Wolvercote and Peartree; or,
- The Scheme should be enclosed in a tunnel where it runs close to residential areas.

6.21 **Sir Muir and Lady Jackie Gray** (Obj 149)

6.21.1 Sir Muir and Lady Jackie Gray live at Lakeside. Sir Muir is a public health professional. Lady Jackie Gray replaced her original proof of evidence, dated 28 September 2010, with that dated 16 November 2010.

Air Quality

6.21.2 The proposal to increase the number of diesel trains significantly, and the prospect of further increases associated with freight traffic, raise important health issues.

6.21.3 Diesel engines emit exhaust fumes containing a mixture of chemicals, some in particulate form. The evidence of harm from any form of environmental pollution is sometimes difficult to establish conclusively but there are a number of important principles:

- a) The concept of a "safe limit" as an absolute cut off point is untenable. A level signifying the upper, or lower, level allowable is chosen for economic reasons. It is a point on a continuous distribution relating harm to exposure.
- b) The Precautionary Principle is used in health protection when, as is almost always the case in science, there is uncertainty. Whilst it never dictates a specific course of action, and often tradeoffs need to be made between costs and the risks of acting and of not acting, the precautionary principle is not a reason to postpone or avoid action. It might be objected that this principle adds little to what we expect from good decision-making. However, decision making can disregard uncertain effects, taking a short-term approach and focusing instead on the certain costs of taking action.
- c) Duration of exposure is as important as concentration of pollutant. The levels of pollution to be expected from the Scheme are of little significance to adults in good health but they are of significance if children are exposed. There are 14 children living in Lakeside next to the line, and Wolvercote Primary School, also close to the line, has approximately 240 pupils, all of whom often play out of doors near the railway.

- 6.21.4 Many hundreds of reports are to be found in the National Library of Medicine about the effects of diesel, sulphur dioxide and nitrogen dioxide. Many of those reports were well designed and well conducted and produce evidence that is classified as strong by epidemiologists.
- 6.21.5 There is strong evidence that there are harmful health-related effects of air pollution, particularly resulting from transport and emissions from diesel engines. There is debate about the carcinogenic effects of diesel but no debate about the relationship between pollutants and lung diseases in adults and children. Even particulate traps do not remove all pollutants and it is necessary to protect children from pollution. Evidence was given in examination that, although many diesel-driven railways pass through residential areas, there is no evidence of harm caused to those residents by diesel emissions from trains: the population is too small.

Business Case

- 6.21.6 The Scheme would cause a loss in property values of about £5 million in Lakeside, but there is no mention of that in the full Cost Benefit Analysis that should have been provided. If a full Cost Utility Analysis had been prepared, giving a financial cost to the effects of the Scheme on residents' health and wellbeing, the cost would be seen to be still greater. Chiltern say the likely profit would be £1 million.
- 6.21.7 There is no need for additional passenger train capacity between Oxford and London. As a regular commuter, Professor Sir Muir Gray sees no need for additional capacity. He has never had to stand to Paddington in the morning rush hour. Marylebone is only ten minutes' walk from Paddington, or two stations on the Underground, and there is no need for a 66-minute journey to Marylebone from Oxford. Road access to Oxford's current station is congested at peak times, and the number of rail users there should not be increased.

Vibration and Noise

- 6.21.8 There is no evidence that the soil at Lakeside would transmit vibration caused by trains in the same way as that at Kings Sutton. The suggestion that a wooden fence would make an effective noise barrier is not plausible. Because the railway is on an embankment at Lakeside, a two-metre high barrier is likely to be inadequate there. The track should be lowered, or a tunnel built around it, to reduce noise and vibration associated with the Scheme at Lakeside.

Conditions

- 6.21.9 Without prejudice to their objections, the following parties resident at Lakeside made a joint submission in which planning conditions were suggested (document Obj/149/3): Sir Muir and Lady Gray, Dr Robertson, Professor Korsunsky, Ms Rosenberg, Mr Claye, Mr Taylor. The suggested conditions would all apply to the track at Lakeside and referred to:
- The use of floating slab track to mitigate noise and vibration at source; and,
 - Designing out the effects of increased concentration of chemicals and particulates in the air; and either,

- Placing the railway line in a tunnel, or,
- Limiting train speed to 30 mph, or,
- Adopting a performance-based approach to noise mitigation, requiring the Crossrail noise standards to be achieved inside dwellings and studios (6.20.10).

6.22 **Mr Glyn Taylor** (Obj 132)

6.22.1 Mr Taylor lives at Lakeside, and the railway passes the bottom of his back garden.

Alternatives to the Scheme

6.22.2 Residents along a mile of track from Lakeside to northwest Oxford/Upper Wolvercote would be subjected to trains travelling at 75mph if the Scheme were to proceed. There are a number of alternatives or modifications to the Scheme that could meet local residents' objections either completely or in part.

6.22.3 **A new connection from Water Eaton to the Oxford-Birmingham main line.** This alternative, shown by a drawing attached to Mr Taylor's letter dated 26 February 2010, would depart from the current line to the north of the Water Eaton park and ride site and follow a more western course, crossing the A34, A4165, A4260 and A44 roads and the Oxford Canal, to join the Oxford-Birmingham line a short distance north of its junction with the Cotswold line. This connection could be routed to avoid any housing.

6.22.4 **Terminate the high-speed rail link at Water Eaton Parkway,** which is already proposed by Chiltern to have all the facilities of a main line station. Light trains could shuttle to and from Oxford. More flexibility in train scheduling to and from London would be possible, and construction cost would be saved.

6.22.5 **Construct a tunnel from north of Lakeside to the south of Upper Wolvercote.** This tunnel would be just over a mile long and in part may be a surface tunnel. Provided it was covered with a few metres of soil and landscaped, airborne noise should be completely absorbed. There would remain the question of ground vibration. Chiltern need to show that their track-bed construction would absorb vibration and would continue to do so for many years. The tunnel would result in a cost saving. Tunnels are widely used in Germany to avoid environmental harm and severance.

Safety

6.22.6 There is an additional safety concern at Lakeside. Should a high speed derailment occur there would be virtually nothing to stop the carriages falling into domestic gardens. Of course, derailments should not occur but on this stretch of line a derailment of a freight train, travelling at no more than 30 mph, destroyed the original track – which is why the line now has welded rail.

Freight

6.22.7 It is clear that both parts of Phase 2 are designed to facilitate freight traffic and the East West Rail project in particular, and should have no

part in an inquiry into a passenger service between Oxford and London. Therefore the whole of Phase 2 should be rejected so that those issues may be examined at a future public inquiry.

6.23 **Islip Parish Council** (Obj 294)

Mill Lane, Islip

- 6.23.1 Islip Parish Council supports the proposed closure of the Mill Lane level crossing that forms part of the Scheme.
- 6.23.2 The Scheme proposes to replace the level crossing with Work No. 16 (4.5.19).
- 6.23.3 The Parish Council objects to Work No. 16 on the grounds of the mass of the bridge, its impact on the Green Belt and the setting of the Islip Conservation Area, and Chiltern's failure to properly consult.
- 6.23.4 **The mass of the ramp and bridge** would dominate an important visual aspect of the village. It would intrude on one of the key vistas when approaching Islip from Kidlington, where the Church features prominently in the rural landscape. The parapet wall would dominate the horizon when viewing Islip from the west, resulting in a monotone feature completely out of place in a rural setting.
- 6.23.5 The bridge would be in the **Green Belt**. The most important attribute of green belts is their openness and they assist in safeguarding the countryside from encroachment. The land take by Work No. 16 would be significant and it would have an enormous impact on the geography of the western end of the village in terms of scale and massing. It would reduce the viability of the fields to the north and south for agricultural use, and create a legacy of planning risk.
- 6.23.6 **The Islip Conservation Area** boundary is wrongly identified on Planning Direction Drawing Sheet 19 (CD/1.13). The correct boundary is shown in the Conservation Area Appraisal dated April 2008 (Appendix D to document Obj/294/1). The Appraisal identifies that the "positive vista" from Mill Street looking north to the proposed site of Work No. 16 is a key feature of the Conservation Area, and that significant open spaces and field systems should be retained, particularly in the south and east of the village (where Mill Lane is to be found). The site of Work No. 16 borders the Conservation Area and is an important feature on Mill Street which gives a distinct break between the village and Mill Farm. The field's distinctive characteristic as an open zone would be lost. The dynamic of Mill Lane, and the outlook from the road, would be changed. The bridge would impact most significantly on The Grange. Chiltern's visualisations give a poor idea of the effect the bridge would have on its surroundings.
- 6.23.7 As to **consultation**, Chiltern did not consult Islip in a way that allowed the Parish Council properly to comment on Work No. 16 before the application was published. The Parish Council carried out a survey of all households in September 2011. 95.8% of residents were in favour of retaining the crossing, and of those 94.5% would prefer a subway option in Mill Lane to the Scheme's bridge. It is not the Parish Council's fault that the draft Order proposals for land acquisition are as they are.
- 6.23.8 The Parish Council has considered Chiltern's report *Islip Mill Lane Level*

Crossing Replacement Alternatives Report September 2010 (Appendix A of document Obj/294/1), and supports Subway Option 2 as presented there because:

- The land take would be about half that needed for Work No. 16;
- The subway would minimise impact on neighbouring properties with no overlooking;
- The subway would have only a very localised effect on the character of Mill Lane and the nearby field systems;
- The subway would be less intrusive in the landscape than the bridge, and would preserve and enhance the character and appearance of the conservation area to a greater extent than would the bridge; and,
- It is highly unlikely that anti social behaviour would occur in this rural environment near to houses.

6.23.9 Drainage would need to be considered but the land is on a rise and not prone to flooding here. Suitable engineering solutions have not been considered in enough detail.

6.24 **James and Lucy de Jonge** (Objs 50 and 93)

Mill Lane, Islip

6.24.1 Mr and Mrs de Jonge support the closure of the Mill Lane level crossing in Islip and agree that a replacement pedestrian crossing is required. They object to the pedestrian/equestrian overbridge that forms part of Work No. 16, because of its mass, the impact that land acquisition for the bridge would have on the Green Belt, and the lack of consultation by Chiltern. Their views on each of these matters are entirely in line with those of Islip Parish Council. They prefer Subway Option 2 and share the views of the Parish Council on that proposal; and consider that anti-social behaviour would be more likely to occur on the 24 metre long bridge proposed by Chiltern than in the much shorter Subway Option 2.

6.25 **Ann and Jon Conibear** (Obj 91)

Mill Lane, Islip

6.25.1 Mr and Mrs Conibear live at The Grange, Islip. Their house would be directly affected by the proposed Mill Lane bridge. They support all the arguments put by Islip Parish Council. They also object on the bases of visual impact, loss of privacy, light pollution, risk of antisocial behaviour, inadequate consultation and poor value for money, all associated with the proposed bridge.

6.25.2 **Visual Impact** - The bridge would directly overlook much of the garden at The Grange, changing the aspect from green belt conservation area to intrusive and unnatural banking. It is common ground between Mr and Mrs Conibear and Chiltern's agents that the effect would be shocking (Obj 091/2 Appendix 1) and that the Environmental Statement says that the ramps would have considerable visual impact.

6.25.3 **Invasion of Privacy** – Subject to final positioning of the bridge and barriers there could be a view from the bridge approaches directly into bedrooms and bathrooms at the back of the house. The photomontage shows only a post and rail fence in this area, and the planting proposed

is not specified and might in any case take ten years to reach maturity sufficient to form an effective screen.

- 6.25.4 **Light pollution** could, if the bridge was lit, fall directly into one of the main bedrooms and if there was an installation on the bridge it would be highly visible from the whole of the back of the house and garden.
- 6.25.5 **Additionally**, the bridge could be used for noisy antisocial purposes such as skateboarding. Chiltern had failed to consult properly while they were preparing the Scheme. And the bridge offers poor value for money (Mill Lane has no measurable use by equestrians and pedestrians, and the bridge would cost around £2.7 million) which resource could be put to better use, such as a small simple level crossing and mitigation of the increased train noise associated with the Scheme.

Conditions

- 6.25.6 Without prejudice to their objections, Mr and Mrs Conibear submitted a list of suggested planning conditions (Obj/091/4). These referred to:
- Planting, fencing and parapets to ensure the privacy of The Grange; and,
 - Lighting on the bridge and its approaches.
- 6.26 **Mr and Mrs J Delafield** (Obj 75)
- Mill Lane, Islip***
- 6.26.1 The proposed bridge (Work No. 16) would:
- Be over-specified (In 27 years Mr and Mrs Delafield have never seen a horse crossing the railway at the crossing.);
 - Be in the wrong place; and
 - Use an unnecessary amount of agricultural land.
- 6.26.2 A much simpler bridge is needed, for use by walkers, cyclists and persons pushing prams.
- 6.26.3 Closing the crossing permanently would create a problem in Mill Street, which would become a cul-de-sac of perhaps half a mile in length. In places, Mill Street is only some 3 metres wide and parking by large vehicles (such as a pantehnicon) can block the road for several hours. Closure of the Mill Lane crossing would take away the alternative vehicular route. The consensus view, though, is that overall the village could gain more from the closure than from retaining a level crossing, because Mill Street and Mill Lane are totally unsuited to through traffic and, on balance, closure of Mill Lane to vehicular traffic is to be preferred.
- 6.26.4 Level crossings are present on busy railways elsewhere – for example, at Sandy Lane, Yarnton there is a level crossing of busy lines with HS 125 trains and open access for pedestrians, cyclists and vehicles when a train is not signalled – and Mill Lane could be dealt with in the same way. Alternatively, the crossing could be kept closed and opened only by special request in, say, the event of an emergency in Mill Street.
- 6.27 **Mr Michael Graham and Ms Amanda Roberts** (Obj 39)

Traffic

- 6.27.1 The proposed modifications to the traffic system at the entrance to the Water Eaton park and ride site would not reduce the congestion there because it would not address the cause of the problem there. In the morning the traffic stacks back from urban Oxford and the A4165/A40 roundabout and in the evening, from the Kidlington roundabout.

Works

- 6.27.2 Temporary occupation, for works purposes, of Mill Street Islip could affect access to the home of Mr Graham and Ms Roberts, and could also have safety implications for their young children who are not used to traffic there and who like to play in the family's field on the opposite side of the Street to their house, and which goes down to the river.

Noise

- 6.27.3 The Scheme would increase noise in this part of Islip. Measures such as a noise barrier or a tunnel or cutting should be provided to counter the high level of noise impact that the Scheme would bring.

- 6.28 **The Ramblers' Association** (Obj 41)

Gosford and Water Eaton Footpath No.4

- 6.28.1 Document Obj/041/3 (bundled with Obj/041/2) shows the proposed closure of this footpath, the diverted route that the Scheme would provide, and (in blue) the alternative diversion proposed by the Ramblers. The diversion would follow the eastern side of the A4165 Banbury Road in the vicinity of the Water Eaton park and ride site, across the bridge that carries that road over the railway and the A34 trunk road and on for a total distance of 0.7 kilometres, and then turning to the north-north-east to run along the north side of the A34 for a further 0.7 kilometres. The A4165 is a busy road which provides access to Oxford city centre. The A34 dual carriageway is arguably one of the busiest non motorway roads in the UK outside the main city conurbations with a high density of traffic almost all day, causing resultant noise and pollution. Nobody chooses to walk by the side of a busy A class road for pleasure, never mind the A34.
- 6.28.2 One of the main reasons this footpath is little-used is because it crosses the A34 at grade with no pedestrian provision, thus putting users at extreme risk. The safety concerns arising from walkers using footpaths crossing railways pale to insignificance when compared to the real and all too well-known safety hazards arising from heavily trafficked main roads.
- 6.28.3 A far better solution would be to retain the footpath on its current alignment south of the railway. The path might then be diverted towards the north-east, following the railway on its south-eastern side for about 0.5 kilometres to the new bridge that Work No. 17 would create for the Gosford and Water Eaton Bridleway 5: and that route might then be followed across the A34 on a bridge in relative safety. A traffic-free route from an entrance to the south of Water Eaton Parkway Station to this right of way could be provided, allowing pedestrian access between Kidlington and the station.

Oddington Footpath No. 6

- 6.28.4 Document Obj/041/4 (bundled with Obj/041/2) shows footpath FP318/6, its context and the Scheme proposals. There are a number of considerations, all of which point to preservation of the right of way.
- 6.28.5 The part of FP318/6 that would be extinguished forms part of the direct route between Charlton-on-Otmoor and Weston-on-the-Green enshrined in the Oddington Enclosure Award of 1791 (document Obj/041/5, bundled with Obj/041/2). It is therefore an ancient enduring footpath at least 200 years old and, as a remnant of a world long since disappeared, deserves to be preserved.
- 6.28.6 The net increase in distance associated with the proposed diversion is said to be 1.73 kilometres. The total distance between Charlton-on-Otmoor and Weston-on-the-Green would be increased from 4.36 kilometres to 6.09 kilometres. This is a significant distance which, if resulting from a diversion promoted through s119 of the Highways Act 1980 would be refused as not being in the public interest.
- 6.28.7 Some 1.1 kilometres of the proposed diversion would be close to the railway. Walkers would be in close proximity to 2 or 3, 100 mph trains while walking along this section of the path, and subject to the associated noise and wind buffeting each time. Walkers would not find this congenial; they walk in the countryside for peace and quiet.
- 6.28.8 Chiltern contend that the crossing must be closed because a bridge over the railway here could not be reached for maintenance. But there are roads within 500 metres of the crossing and, with landowner goodwill, a suitable access track could be secured. Keeping the right of way would avoid the need for a long lineside path and would meet with public approval.
- 6.28.9 Page A9 of document CD/1.11 Public Rights Of Way Report says that the crossing appears reasonably well used; and (anomalously) that a footbridge crossing here was dismissed because of low levels of usage. Table D1 in the same document reports that a user survey was carried out at the Oddington Foot level crossing on three hours of one day; but that is nowhere near the period necessary for a meaningful result.
- 6.29 **Oxford Fieldpaths Society** (Obj 55)
- 6.29.1 The Society is a long-established walking group based in Oxford, dedicated to the use of footpaths and their preservation. The Society supports the principle of upgrading the railway line, which would clearly be of great benefit to the area as a whole. But the Society objects to the proposed closure of two level crossings: the Oddington Foot crossing (footpath FP318/6) and the Beebont bridleway crossing (BP157/4).
- 6.29.2 The rights of way user survey conducted by Chiltern has some shortcomings. The duration of the surveys was too short to give valid results. Stiles and gates on the routes were deficient in various ways, ditch crossings sometimes hard to find, and the footpaths generally poorly maintained so that use of the paths was likely to be discouraged. These factors must undoubtedly influence the number of walkers using these rights of way.
- 6.29.3 Chiltern argue that this would be a new railway to which the Office of Rail

Regulation's *Policy On Level Crossings* should apply. But a railway dating back to 1846 is not a new railway and is not subject to standards applicable to them.

- 6.29.4 Improvement of the rights of way network is an important aim, as exemplified by the Oxfordshire Rights of Way Improvement Plan 2006-2011 (CD/4.5). And, although Chiltern suggest the contrary, it is not the case that the public rights of way network is disjointed and fragmentary.

Cultural Heritage

- 6.29.5 The Society seeks the preservation of the rights of way. They form part of our cultural heritage. Policy HE9.1 of Planning Policy Statement 5 *Planning For The Historic Environment* (CD/3.29) establishes a presumption in favour of conservation of designated heritage assets. Once lost, heritage assets cannot be replaced. Policy HE9.6 provides for heritage assets that are not currently designated, and says the absence of designation does not confer lower significance. Otmoor is an area with an elusive quality that flows out of the coherent nature of Otmoor and its long cultural heritage that is eloquently represented in its landscape, a small part of which can be experienced by walking either footpath FP318/6 or bridleway BP157/4. This would be lost with the closure of the rail crossings on those paths. This Cultural Heritage is specific to the routes of the rights of way themselves and not the generality of the area as a whole.
- 6.29.6 Oddington Footpath FP318/6 is not just another field path but was the path from Charlton-on-Otmoor to the former Oddington Abbey (which at the Dissolution probably became what is now Oddington Grange).
- 6.29.7 The Cultural Heritage of what is called the Beebont Bridleway (BR157/4) is, if anything, more significant. It is evident from the earliest County Map of 1796 that Mansmoor Road continued to Wendlebury and Bicester. It is 6 metres wide, which indicates it to be an important route, certainly as important as a medieval drove road; and approaching the width of roads built by the Romans. It is thought that a Roman road to Alchester approached that Roman town along what is now the line of Mansmoor Road and the Beebont bridleway. The route later formed a key part of the medieval open field system and the land to the south and west of the old Mansemoor Lane were subject to the Parliamentary Enclosures of 1858 – an earlier Enclosure having resulted in the Otmoor Riots of September 1829. It cannot be said that the riot centred on the Enclosure of the land adjacent to what is referred to as the Beebont bridleway. It is clear that the last Enclosures were concurrent with the coming of the railway and included the lands adjacent to the bridleway.
- 6.29.8 The Oddington Footpath and the Beebont Bridleway have a place in maintaining Otmoor's sense of place. They are part of the highway system from which our society grew. As highways, it is their route that matters, not their fabric, and they should be preserved.

Footpath Diversions

- 6.29.9 Footpath diversions made under Section 119 of the Highways Act 1980 should be not substantially less convenient to the public than the pre-existing route, and the decision maker should have regard to the effect

which the diversion would have on public enjoyment of the path or way as a whole. DEFRA's circular 1/09 *Rights of Way* seeks consideration of the effect that the diverted way will have on the rights of way network as a whole.

- 6.29.10 The proposed diversion of Oddington Footpath would be 1.8 kilometres long, alongside a busy high speed railway. This would be substantially less convenient to the public and would not add to public enjoyment.
- 6.29.11 The proposed diversion of the Beebont crossing would see a charming, wide, well-grassed path (effectively a drove road width) replaced with a diversion approaching 0.9 kilometres around the back of Holt Farm. This would become a mud bath for much of the year. This would not be expeditious for walkers who, if they survive crossing the farm unscathed, would have of the order of an extra quarter-hour's walk.
- 6.29.12 The closure of Oddington Foot and Beebont bridleway crossings would not comply with:
 - a) Circular 1/09, which provides for consideration of "the effect that the diverted way will have on the rights of way network as a whole" and says that public rights of way "are a unique and valuable resource and a significant part of the Country's heritage";
 - b) Oxfordshire County Council's Rights of Way Improvement Programme 2006, which calls for "a better joined up network that meets the demands of the users"; or,
 - c) The Non-Statutory Cherwell Local Plan 2011, which includes Policy R4 "development over public rights of way will not be permitted unless a suitable diversion can be secured which will not prejudice public rights" and the narrative explanation that "a diversion will not be considered suitable if it is substantially less convenient to the public or would be detrimental to the public's enjoyment of the route".
- 6.30 **Charlton-on-Otmoor Parish Council** (Rep 9)
Mansmoor Road
 - 6.30.1 Mansmoor Road provides access to two farms and overwintering livestock pens and to land owned by 8 other farmers and smallholders. Four landowners use the lane at least twice a day while others use the lane very regularly. It is also used by horse riders and dog walkers daily. The Scheme seeks temporary closure of Mansmoor Road and Chiltern has said that plenty of notice would be given when closure is required, but any closure would be unacceptable. There is no suitable alternative route.
London Road, Bicester
 - 6.30.2 The Council is concerned by a claim made on behalf of Chiltern that road traffic delays at the level crossing in London Road would be "modest". London Road is an important route for the people of Charlton-on-Otmoor. There has been no detailed consultation with locally affected residents.
- 6.31 **Mr K A Hayward** (Obj 1)
 - 6.31.1 Mr Hayward's land includes parcels 14010 and 14011. Loss of the two parcels would seriously reduce the serviceability of Mr Hayward's 10-acre

field, used for grazing horses. The land is enclosed by trees and hedgerow and is ideal for its current use. If used temporarily for a worksite, as Chiltern say they intend, the existing trees and hedge along the railway line would be severely damaged or destroyed. There is no need for such disruption; Chiltern intend to build a bridge in the adjacent field and would create a worksite there too, which could also accommodate the worksite proposed on Mr Hayward's land. Should a worksite be really necessary on Mr Hayward's land then stock fencing or a hoarding should be provided at the worksite boundary; and the field restored to its original condition as soon as the local work is complete.

6.32 **The Trustees of A Deeley and the Trustees of I H G Calcutt**
(Obj 194)

Background

6.32.1 The Trustees of A Deeley ("the Deeley Trustees"):

- Own land and residential property at Alchester Terrace, adjacent to the railway level crossing in London Road, Bicester (the Deeley Trustees' ownership of parcel 04003 is not acknowledged by the Order);
- Own land to the south-east of the railway between Merton and Wendlebury (the Deeley Trustees' ownership of parcel 10b002 is not acknowledged by the Order);
- Own part of the access road (Mansmoor Road) linking Holts Farm to Charlton-on-Otmoor; and
- Benefit from rights of way linking into Langford Lane to the north-east of Wendlebury.

6.32.2 The Trustees of I H G Calcutt ("the Calcutt Trustees") own land to the south-east of the railway between Charlton-on-Otmoor and Holts Farm, together with part of the access track linking those locations. This land is referenced wrongly in the Book of Reference.

Noise At Alchester Terrace

6.32.3 Planning permissions for new houses impose conditions for noise protection of 45-59 dB at night. Noise increases of up to 3 dB are considered slight, 3 to 5 dB are considered moderate, and 5 to 10 dB are substantial. Predictions for the closest properties on London Road show a baseline level of 51 dB during the day and 49 dB at night, and with-scheme levels of 62 dB and 60 dB. The resulting change in daytime levels is 11 dB, and 12 dB at night; these are high impacts. Chiltern do not propose noise mitigation here until Phase 2, but it should be provided for Phase 1.

6.32.4 During construction of the new Bicester Town station, noise levels of 74 dB are predicted, which would be 4 dB higher than the Environmental Statement's daytime threshold of significance on residential properties of 70 dB.

Air Quality

6.32.5 The Scheme would cause traffic queues to form on the approaches to the level crossing, to a greater extent than now. This would cause poor air quality for the residents of Alchester Terrace.

Other Matters At Alchester Terrace

- 6.32.6 The works would cause a moderate adverse visual change to properties on Alchester Terrace.
- 6.32.7 The increased standing traffic would lead to poor access at Alchester Terrace.

Access

- 6.32.8 The closure of Langford Lane Crossing and Holts Farm Crossing would lead to increased journey times in accessing the Trustees' land.
- 6.32.9 Better access via the proposed Langford Lane diversion to the east of the railway would be provided by the route shown at Appendix 3 of document Obj 194/2. This alternative would run directly east from the bridge in Work No. 11. Other affected land owners also support this route.
- 6.32.10 Document Obj 194/3 shows an alternative arrangement for access in place of College Farm crossing. This would take access from the new Langford Lane bridge at Elm Tree Farm, rather than across the Deeley Trustees' land and could allow maintenance and accommodation access and temporary access to Works No. 2 and 12. The Scheme proposal provides excessive land take along a route that would involve crossing two watercourses. The alternative now proposed would run from Work No. 11, along land parcels 08005, 09005, 09006, 09008, 10010, 10034, 10021 and 10036. The Deeley Trustees were not adequately consulted on the proposed route for the access track which crosses their land. The new track would improve the access to the land to the east of the railway that has been marketed for sale. Currently the land can only be reached through the farmstead to the west of the railway and over the level crossing. The proposed access would potentially allow the land to be sold away separately thereby increasing its value.
- 6.32.11 The Trustees oppose the use of Mansmoor Road as access to a new bridge at Holts Farm. The proposed intensified use would increase the requirement for maintenance of Mansmoor Road. The proposed land take for the new bridge (Work no. 13) is excessive and need not involve any land take from the Calcutt Trustees; and building over land parcels 12010 and 12a002 would leave a field shape that could not be efficiently farmed.

6.33 **Topbreed Limited and Primepark Limited** (Objs 189 and 190)

Introduction

- 6.33.1 Topbreed Limited ("Topbreed") owns some 180 acres of land to the south of the railway, including parcels 07a005 and 07a006. Primepark Limited ("Primepark") is Topbreed's tenant and occupies over 180 acres of agricultural land. Mr Kerry Clarke appeared for both companies and their cases were presented together.
- 6.33.2 Topbreed and Primepark object to the Scheme proposals for an alternative access to the land which currently takes road access via the Langford Lane level crossing, and on other grounds. The land in question includes that agricultural land in which they both have interests.

Background to the Access Proposals

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- 6.33.3 There is no dispute that the Langford Lane level crossing should be closed as part of the Scheme.
- 6.33.4 Chiltern initially proposed a bridge over the level crossing. Neither Topbreed, Primepark nor the occupiers of Merton Grounds Farm or Merton Grounds Cottage (residential properties which also take access via the level crossing) were aware of that proposal until much later than the exhibitions and consultations conducted by Chiltern before 6th July 2009.
- 6.33.5 At a consultation with English Heritage on 6 July 2009, Chiltern decided not to put the proposed bridge over the railway near to the Langford Lane crossing, because a changed location would avoid disturbing the Alchester scheduled monument.
- 6.33.6 Chiltern duly contacted the landowner affected by the alternative route (which is similar to the published Order proposals), but did not contact Topbreed, Primepark or other neighbours affected by this alternative proposal, who therefore did not know about it.
- 6.33.7 Consequently, Topbreed and Primepark lost the opportunity to make representations or suggestions to Chiltern at an early stage, and subsequent attempts to make representation to Chiltern's agents were dismissed.

Objection

- 6.33.8 Topbreed and Primepark objected, by written representation submitted after their appearance at the Inquiry (Obj/189/6), to the alignment of Work No. 11 proposed in the draft Order to the east of the railway because:
- a) The Order proposal would cause significant damage to the historic environment;
 - b) The lack of consultation, prior to the Order being published, has deprived the affected owners and residents of their right to full representation and that failure has led to a loss of their rights under the Human Rights Act 1998, as consultation prior to the Order Route Publication was not completed;
 - c) The lack of consultation has led to the draft Order and Modification Order being proposed on incorrect assumptions of ownership and impact on those with a right of access, egress or passage;
 - d) The line of the Order route would create a dangerous road layout at the Wendlebury Gate Stables;
 - e) The line of the Order route would result in unnecessarily longer journeys for most users for whom it would provide sole vehicular access to their properties; and,
 - f) The alternative Orange Route demonstrates an alignment, which would not cause such harm, and the Scheme should be modified to substitute the Orange Route for the alignment of Work No. 11 to the east of the railway.

Langford Lane: The Orange Route

- 6.33.9 The Orange Route is shown by the Project Map on page 4 of document Obj189/2. On that plan, the Orange Route departs from the Scheme proposal (shown red on the plan) and follows a more easterly alignment, across arable agricultural land, alongside existing field hedgerows from point B via point C to point D (a distance of 804 metres). At point D the route would cross Langford Brook before turning north along Langford Lane (a public bridleway and private road here) which it would follow past point E to point F (570 metres run), where the route would meet the end of the current public road.
- 6.33.10 The Scheme proposal would pass over agricultural land in a broadly north-easterly direction from point B to point F (965 metres).
- 6.33.11 The Project Map shows the Alchester Roman Town scheduled monument and, in brown, the site of the Roman Parade Ground (reference 134, page H8, Environmental Statement Volume 4, CD/1.18) and the site of the road that led to it from the Roman Town (reference 209, page H12, *ibid*). The Scheme proposal would pass over the site of the road to the Parade Ground but the Orange Route would not, and would instead pass to the south of the Parade Ground. Previous archaeology digs have established that suburbs to the east of Alchester Roman Town do not exist beyond the Langford Brook. The Orange Route takes a shorter route through the archaeologically interesting area and so is less likely to disturb proven archaeology than the Scheme proposal, which would disturb archaeological site 210, recorded on page H12 of the Environmental Statement as "site of building". English Heritage have been consulted on the Alternative and they discussed the matter with the Oxfordshire County Archaeologist and replied that the Alternative "may have an impact upon buried archaeological deposits, but it is certainly worth considering and is probably better than the currently proposed route." (Obj 189/2, Appendix 2).
- 6.33.12 Topbreed, Primepark, the Deeley Trustees and the occupiers of Merton Grounds Farmhouse and Merton Grounds Cottage all have vehicular access rights along the Langford Lane Bridleway. Bridleway traffic travelling to the main road would be diverted to the Orange Route. The extra journey length for those properties would be less, and would have fewer difficult vehicular turns, than with the Scheme proposal.
- 6.33.13 Topbreed and Primepark support the findings in document Obj/191/9 regarding travel distances. Less traffic would pass the Wendlebury Gate Stables and the nearby dwelling "Bramlow", and this would reduce the traffic risk to equestrians.
- 6.33.14 The Orange Route would be simpler to build than the Scheme proposal. It would require less land in Flood Zone 3 than the Scheme proposal would, and any conditions sought by the Environment Agency for the Scheme proposal could be imposed on the Orange Route. Wildlife matters would remain unchanged. Bridleway users would have a more direct route between Bicester and the Moreton Road. Oxfordshire County Council as local highway authority has not been consulted on the Alternative.
- 6.33.15 The owners of land required for the Alternative have been consulted and

support it:

- For section B to D, the owner Mr Shouler of Elm Tree Farm is prepared to support the Alternative, provided that statutory compensation levels remain payable (Obj 189/2, Appendix 1 item 1);
- For section D to E, the owner Topbreed is prepared to transfer its freehold interest in the land for £1.00;
- For section E to F the owners of Bramlow and the Wendlebury Gate Stables are prepared to support the Orange Route (Obj 189/2, Appendix 1 item 3) and Mr Offord is prepared to offer his land at market value to enable the Orange Route to be built.

6.33.16 Document Obj/189/5 sets out land provision for the Alternative, shows the land interests involved and re-iterates the support of the landowners for the Alternative. There would be no need for the modified draft Order to be re-published.

6.33.17 With one exception, all those with rights of way or accesses affected by the Orange Route support it. The sole exception is the owner of Alchester House, who has neither indicated support nor opposition to the Orange Route.

6.33.18 Document Obj/189/6 is signed by various interested parties to indicate their support for the Orange Route.

Conditions

6.33.19 Without prejudice to their objections, Topbreed and Primepark submitted a list of suggested planning conditions (Obj/189/8). These referred to:

- Highway layout, parking on the road, pedestrian provision on the bridge at Work No. 11, timing of the highway works.
- Flood risk assessment and surface water drainage assessment.

6.34 **Catherine and Bartholomew Quinn** (Obj 230)

6.34.1 Catherine and Bartholomew Quinn are the residents of Merton Grounds Farm Cottage ("the Cottage"). The Scheme proposal would, by closing Langford Lane level crossing, close the sole vehicular access from the Cottage to the public road network; and replace that access by means of Work No. 11. That aspect of the Scheme has a number of shortcomings:

- It would force all traffic going to or from the Cottage and other property nearby to negotiate a sharp hairpin bend at Wendlebury Gate Stables, an area cramped during business hours with stable traffic, parked cars, horseboxes, horses, riders and children. There would not be enough space here for very large vehicles such as domestic fuel tankers which make deliveries to Bramlow, the Cottage and Merton Grounds Farm.
- It is feasible that companies would be unwilling to deliver to these properties if the Scheme proposal for Work No. 11 were implemented. And local service providers (Cherwell District Council and Royal Mail) might reasonably object to the extra distance to Merton Grounds. The turnout time by emergency services would be increased.
- The Scheme proposal, with the modification now promoted by Chiltern

to the west of the railway, would add an estimated 5 kilometres to each return trip between the Cottage and Bicester – a trip that is made some 18 times per week by either Ms Quinn or her son. The extra travelling time involved would be almost 2 hours per week.

Consultation by Chiltern had been incomplete. Document CD/2.11 is the Pre-TWA Options Report for Langford Lane, and it lists Stakeholders but excludes Ms Quinn.

- 6.34.2 The Quinn family therefore supports the Orange Route, for the same reasons as those given by Topbreed Limited (6.33.11 to 6.33.14). The Orange Route would reduce the distance travelled by the Quinn family by some 30.6 kilometres per week, compared with the Scheme proposal as amended by Chiltern, and save them 37.44 minutes per week. The amended Scheme proposal would increase the annual travel distance for a typical resident of the area by 2021 kilometres per year.
- 6.35 **The Owner and Residents of Merton Grounds Farm (Obj 191)**
- 6.35.1 Merton Grounds Farm is a single residential property. The property has a restricted right of access to the south but the route is rarely used by the owner and residents of Merton Grounds Farm (“the Residents”) and is gated, which prevents emergency access in that direction. In all other respects, Merton Grounds Farm takes access from the north, currently via Langford Lane level crossing but (if the Scheme were implemented) via Work No. 11 in future.
- 6.35.2 The Residents were not consulted by Chiltern in a timely way regarding Chiltern’s proposals. Chiltern’s Statement of Consultation (document CD/1.5) says at 4.17 that leaflets were distributed in various postcode areas including OX25 2, but none has been received at OX25 2NS. The Residents became aware of the proposals only because a leaflet was delivered to their agent’s home address in Bicester.
- 6.35.3 The Scheme proposal for Work No. 11, as modified by Chiltern, has a number of shortcomings:
- a) Increased travel distances to Merton Grounds Farm: the Scheme proposal as modified by Chiltern would add nearly 2.5 kilometres to every journey. There would be a significant cost and time implication for the Residents.
 - b) The Environmental Statement takes the view (CD/1.16, page 12-11) that the part of Langford Lane that Work No. 11 would replace is a public road and not part of the public rights of way network and that the extra length is not significant for its primary users, people in cars. But the road there is part of an important link for horse riders and cyclists, via the public bridleway section of Langford Lane. The extra 2.5-kilometre distance is significant for non-motorised users.
 - c) The junction of Work No. 11 with Langford Lane would be awkwardly laid out, which may compromise access to Merton Grounds Farm. This regularly happens now, due to vehicles parked on the roadside at Wendlebury Gate Stables, and the new geometry would worsen matters. It is important that emergency vehicles should be able to reach Merton Grounds

Farm.

- d) The new road would give access to footpath FP398/6 and would provide a convenient short cut to the bridleway near Merton Grounds Farm. This would encourage use of the path which would reduce security at Merton Grounds Farm. Also, cyclists and horse riders illegally use the footpath now, and the new layout would encourage that.
- e) The Residents share the concerns expressed by Topbreed regarding the effect the Scheme proposal would have on archaeology (6.33.11). Additionally, page H20 of the Environmental Statement (CD/1.18) reference 313 is to an extant hedge that, in the terms of the Schedule 1 Part II criteria (archaeology and history) of the 1997 Hedgerow Regulations, is an "Important Hedgerow". The Scheme proposal would remove part of this hedgerow. Regulation 6c allows that only to obtain access to land where another means of access is not available or is available only at disproportionate cost. An alternative means of access is available, in the Orange Route mentioned later in the Residents' submission.
- f) As regards Flood Risk, Annex G2 of Volume 4 of the Environmental Statement (CD/1.18) applies on page 31 a Sequential Test to Work No. 11, which is in Flood Zone 3. The result is that the Scheme proposal is the most appropriate for four reasons:
- 1 Minimised extent of new road, reducing the probability of any significant obstruction to flood flows across the site;
 - 2 Avoids impacting on a Scheduled Monument and existing residential and equestrian properties;
 - 3 Maintains access to the MoD Bicester sidings;
 - 4 Enables the infrastructure for the rail approach to Bicester Town Station;

and that this justification enables the site to pass the Sequential Test.

The Orange Route offers a stronger justification for the outcome of the Sequential Test as it places a larger proportion of the route into a Flood Zone 1 area. And Reason 2 above proves that other parties with an interest in the area, whose interests are affected by the proposed route, have not been taken into account by Chiltern in the whole process.

The Orange Route

- 6.35.4 The Residents therefore support the proposal for the Orange Route, described previously in this report (6.33.9). This offers the following serious advantages when compared with the Scheme proposal:
- Shorter travel distances for vehicular traffic that currently passes over the combined Langford Lane bridleway and private means of access:

including that associated with five farming and residential ownerships;

- Removal of through traffic from Bramlow, Wendlebury Gate Stables and Alchester House;
- Reduced disturbance at Bramlow and Wendlebury Gate during construction;
- Easier field access and less agricultural land take from Elm Tree Farm;
- More convenient access for cyclists and equestrians to the bridleway south of Merton Grounds Farm, and reduction of the Residents' security concern;
- Avoidance of the adverse archaeological effects associated with the Scheme proposal;
- Reduced length of road (approximately 350 metres less) in Flood Zone 3 and, due to the incorporation of the existing bridleway in part of the route, less new road surface in the floodplain area;
- Use of previously-developed land in the Green Belt in that some of the existing bridleway would be incorporated in the route;
- Easier to build and less need for compulsory purchase of land.

6.35.5 The Environment Agency has been consulted on the Orange Route (Appendix 1, Obj 191/6). Their view is that the Orange Route "appears slightly favourable from a floodplain perspective" and that they "would always like to see the number of crossings of water courses minimised", which the Alternative would do. They "are not strongly in favour of either route".

6.35.6 Travel distances have been assessed between a common point on Langford Lane bridleway, south of the Orange Route (point D) and each of: the A41 roundabout on the southern fringe of Bicester (point A), and the northern entry to the circulatory roundabout at M40 junction 9 (point C). Due to various traffic management measures, each travel distance depends on the direction of travel; and cyclists can take a short cut on the way to Bicester. The modified Scheme proposal and the Orange Route would have the following effects on the various distances:

Access Proposals and Distances (kilometres)			
Route and mode	Current	Modified Scheme	Orange Route
A to D (cycle)	2.99	5.45	4.69
D to A (cycle)	2.99	5.45	4.69
A to D (car)	3.00	5.50	4.47
D to A (car)	3.44	5.92	5.16
C to D (car)	4.72	7.05	6.27
D to C (car)	3.72	4.40	3.62

6.35.7 Traffic surveys were undertaken in Langford Lane, at the level crossing and at a point south of Bramlow and the Wendlebury Gate stables. The surveys were made on Saturday 8 January 2011 and Tuesday 11 January 2011. On both days, traffic was counted over a 12-hour period from 0700 to 1900. No unusual events occurred on the highway during those

periods. Both days were exceptionally busy for the Stables, as a lot of riders had cancelled previous appointments due to snow during the weeks before. The survey findings are summarised in this table:

	Destination / Origin					
	Alchester House		Stables + Bramlow		Properties South	
Sat 8 Jan	4	2.9%	71	52.2%	61	44.9%
Tue 11 Jan	6	4.8%	60	47.6%	60	47.6%

6.36 Mr and Mrs Offord and Mr and Mrs Bradshaw (Obj 238)

6.36.1 Mr and Mrs Offord and Mr and Mrs Bradshaw ("Messrs Offord and Bradshaw") own and run Wendlebury Gate Stables, in Langford Lane. The railway runs for about 275 metres along the north west boundary of the land associated with the Stables, as shown by Document 1 attached to inquiry document 238/2. The site extends to some 20 acres and 11 staff are employed there, including 5 British Horse Society qualified instructors. Messrs Offord and Bradshaw have five separate businesses there:

- Livery stables and yard
- Horse riding instruction
- Competition training and remedial training
- Stud
- Saddlery.

6.36.2 Horse riding instruction takes place for about 40 hours per week. Typically there are about 40 horses on site, about 10% of which at any one time are transient.

6.36.3 Teaching takes place in two enclosures, known as the large riding school and the small riding school. The railway is 160 metres from the riding arena. Teaching sometimes also takes place in the paddocks opposite Bramlow. Safe and satisfactory teaching requires that trainee riders should be able to hear and understand the voice of the instructor. Very occasionally (once or twice per month), military planes pass by but they can be heard when distant and are not a problem. Speech between instructor and rider is only ever interrupted by windy weather, and on such days teaching is cancelled.

Effect Of The Scheme Proposals On Conditions At Wendlebury Gate

6.36.4 The Scheme's effects at Wendlebury Gate relevant to Messrs Offord and Bradshaw's objection would include:

- Noise from passing trains, that would interfere with speech between an instructor and a rider; and,
- Noise and other effects associated with passing trains which, individually or together, frighten the horses.

Noise From Passing Trains

- 6.36.5 Messrs Offord and Bradshaw have therefore commissioned a technical report *Quantification Of Noise Impact Upon Wendlebury Gate Stables* (24 Acoustics Ltd, 3 September 2010) (Obj 238/2 appendix 3).
- 6.36.6 The technical report says in relation to freight trains that train noise (during a pass-by lasting 25 seconds) would cause severe interference with speech communication at both riding schools.
- 6.36.7 In respect of passenger trains, the technical report finds that the impact from passenger train movements could be lower, however it is likely that some speech communication, particularly in the large riding school, would be impeded.
- 6.36.8 The technical report notes that a noise barrier fence 60 metres long is proposed in mitigation between the railway and Alchester House, and continues as follows:
- “An extension of this barrier along the boundary between the railway and the land owned by The Stables would be of enormous benefit to The Stables. On the basis that it would reduce the noise level from each train pass-by by 10 dBA there would be minimal effect on speech intelligibility (from train noise) at any area on either riding school.”
- There is a footnote: “A barrier insertion loss of 10 dBA is considered easily achievable between the railway and all areas of the stables given the appropriate fence construction and height.”
- 6.36.9 Mr Offord confirmed in examination that the height of the proposed fence had not been established, and that the author of the technical report had not calculated the noise effects at the stables of providing such a fence with the Scheme.
- 6.36.10 Messrs Offord and Bradshaw believe that the only sensible solution would be for Chiltern and Network Rail to agree to the erection of some 350 metres of fencing on the railway embankment. The budget price for such a fence has been quoted as £59,500. English Heritage do not object to the proposed similar fence at Alchester House, so it does not seem that further such fencing near the Scheduled Monument would give rise to objection.
- 6.36.11 Chiltern refers to conditions at Kings Sutton. All but one of the trains observed there had much lower speeds than those that would pass Wendlebury Gate.

Risk Of Fright To Horses

- 6.36.12 The Office of Rail Regulation recognises the dangers caused to horses by sudden noise or movement caused by passing trains in that it has issued an Inspection Report (for a level crossing in Leicestershire) that said “horses are easily spooked by sudden noise or movement, and thus a horse rider may lose control of the animal, and be fatally injured by the horse” (Obj 238/2, appendix 1, paragraph 35).
- 6.36.13 Although horses can adapt to noise and sudden movement arising from railway lines over a period, many of the horses at Wendlebury Gate are short-term visitors and do not have the opportunity to adapt. And resident horses will each also have a period of adaptation, during which

they would be at risk.

- 6.36.14 Mr Michael Peace is a renowned horse behaviour expert, a visiting lecturer on equine matters at Witney College and Cambridge University, and a trainer for the Metropolitan Mounted Police. He has considered the Scheme proposals and visited the site. He gave evidence at the Inquiry:

"High speed trains at such close proximity will almost certainly cause grazing horses, ridden horses, and horses being handled in and around the stable yard to become agitated by such sudden noise with increased potential for serious injury and/or death of horses, riders, handlers and third parties."

- 6.36.15 That view is supported by the written evidence of Fiona Nobbs BVSc MRCVS, of the Hook Norton Veterinary Group (Obj238/5, Appendix 2).
- 6.36.16 In examination, Mr Peace said it is generally known that horses don't like railways. There is little general evidence on the subject, nor a single reported incident in the whole of Europe, because riders avoid high speed trains. Riders would attend the riding school because they lack experience, and that lack of experience would add to the risk.

Effect Of The Changed Conditions On Riding At Wendlebury Gate

- 6.36.17 It is normal for a rider and instructor to work at distances of up to 30 metres (when the instructor is in the centre of the "large" riding school) and perhaps up to 60 metres. Without the proposed barrier, freight trains would create noise levels in the teaching arenas such as to drown out the instructor's voice, and at the same time possibly spooking the ridden horse (either directly or as a result of seeing other horses spooking in adjacent paddocks), thus creating two elements of hazard.
- 6.36.18 Spooking is more likely to come about as a result of horses in paddocks between the railway and the riding school being startled by the noise and movement of a passing train, and that effect would be intensified as the train suddenly emerges from behind the noise barrier to be provided at Alchester House.
- 6.36.19 Given that there would be one freight train per hour this would mean 40 potential risk situations per week. Such situations are not common because no-one starts a riding school next to a high speed railway.
- 6.36.20 Cherwell District Council is the authority responsible for the licensing of the riding stables through the Riding Establishments Act 1964 and 1970. Their relevant officer wrote on 30 April 2010 (Obj 238, statement of case, document 5) that the Scheme proposals may increase "spooking" of horses and, consequently, increase the number of un-seatings. The change due to the Scheme would be such as to require Messrs Offord and Bradshaw to re-assess the risk, in accordance with the Management of Health and Safety at Work Regulations, 1999.
- 6.36.21 Legal advice obtained by Messrs Offord and Bradshaw (Appendix 4 of Obj238/2) includes:

"The likelihood of the increase of sudden noise or movement is inevitable, based on the proposals set out in Project Evergreen 3, and thus the risk of riders whether in the arena or in the paddocks close to the line itself of losing control of the horse or pony will increase and as

such the risk of injury and/or death is also increased..."

and, in respect of the proposed nearby construction works in Langford Lane:

"That is a perceived and obvious risk and the business would be negligent at the very least and failing in its duty and potentially risking prosecution if it continued to use an arena where it was obvious that the risk of an accident had increased significantly because of the construction..."

- 6.36.22 A Health and Safety Assessment Report has been prepared by Harris and Porter (Health and Safety) Limited (Obj 238/2 Appendix 7). This demonstrates an unacceptable level of risk if no mitigation is made.
- 6.36.23 On the basis of the Harris and Porter report and his own observations, the inspecting vet for the licensing authority has written that unless the risk factors associated with the Scheme were reduced to an acceptable level then he would advise the licensing authority not to renew the riding school licence (Obj 238/2 Appendix 8).
- 6.36.24 Chiltern point to conditions at five other riding schools and equestrian centres close to railways. Messrs Offord and Bradshaw have contacted those establishments and received the following information:
- Castle Hill Riding School, near a railway on an embankment. As one moves away from the foot of the railway embankment, the noise gets louder. At 160 metres voice communication was interrupted by the high speed trains.
 - Cathiron Farm Livery Stables. Not a riding school. The owner complains about train noise and says it would be impossible to run a safe and successful riding school there. The business relocated to this site from elsewhere (Obj 238/7, appendix 2).
 - The Riding Centre. This site is 300 metres from the railway. The railway traffic is lighter and slower than that proposed for the Scheme (Obj 238/7, appendix 3).
 - Sandwell Valley Riding Centre. The line speed is lower than proposed at Wendlebury. The line is 300 metres away. The motorway gives a continuous low hum, which is not a problem.
 - Alder Root Riding Centre. Use hand signals when trains drown out the instructor's voice. Hand signals are unsatisfactory, especially when the rider faces away from the instructor or when the rider is paying attention to, for example, jumping a course.
- 6.36.25 The danger of sudden noise and movement arising from the construction and operation of the Scheme could therefore result in Messrs Offord and Bradshaw:
- a) Contravening the Health and Safety Act 1974, the Riding Establishments Act 1964 and 1970 and the Animal Welfare Act 2006;
 - b) Losing their licence to operate;
 - c) Facing actions and claims for damages made by horse owners and other third parties should accidents occur;

- d) Facing significantly increased public liability insurance premiums or possibly the inability to obtain insurance cover;
- e) Losing clients, with a subsequent reduction in turnover and profitability and consequently in the workforce; and,
- f) Potentially losing the business due to any of the above, including loss of capital values on the premises and land.

6.36.26 Mitigation options have been considered, including:

- A noise fence, as previously described (6.36.8);
- Soundproof buildings, moving the training school indoors. This would be more costly than the noise barrier, and would not remove the significant risk that would remain in the 6 acres of paddock land adjoining the railway.
- Relocation of the business. But it is extremely unlikely that any suitable premises would become available before construction of the Scheme began. A Greenfield site, even if available, could not be developed in the available time.

6.36.27 A noise fence offers the only sensible solution.

Costs

6.36.28 It is unfair that Messrs Offord and Bradshaw have been put to expense incurred in preparing their representation. Chiltern should have been more helpful in seeking a solution with objectors, but delays and procrastination by them have increased the costs borne by objectors.

The Orange Route

6.36.29 Messrs Offord and Bradshaw support the Orange Route, a variation on Work No. 11 described elsewhere in this report (6.33.9), because:

- a) It would reduce traffic passing Wendlebury Gate Stables;
- b) It would remove the need for a bridge to be built near Wendlebury Gate, possibly leading to intrusive and commercially harmful noise and inconvenience; and,
- c) Less of their land would be taken.

Conditions

6.36.30 Without prejudice to their objections, Messrs Offord and Bradshaw submitted a list of suggested planning conditions (Obj/238/7, appendix 5). These referred to:

- Noise mitigation,
- Boundary fencing,
- Construction, and
- Road drainage.

/over

6.37 **Brian and Pheobe Davies** (Obj 111)

London Road, Bicester

6.37.1 Upon completion of Phase 2 there would be 12 trains per hour crossing London Road and the level crossing would be closed to road traffic for perhaps 24 minutes per hour. London Road is already busy and the Scheme would draw more traffic to it, en route to Bicester Town Station. Traffic congestion would increase, generally and at the access from London Road to Westholm Court. The current redevelopment of Bicester town centre will add to this congestion. The traffic effects of the Scheme throughout Bicester are not understood by the promoter.

6.37.2 Bicester Town Station should therefore be re-configured so that the station buildings would be located to the north of the line and parking should be put south of the Talisman Business Centre. This would reduce the amount of traffic at the London Road/Station Approach junction, compared with the Scheme proposal, and also reduce the amount of traffic using the level crossing. Perhaps the exit road from Westholm Court should also be included in the re-modelled Station Approach junction, perhaps with some form of control at the junction.

Gavray Drive, Bicester

6.37.3 Gavray Drive was originally intended as a through route to Launton Road and its industrial area. If that connection were made as part of the Scheme then some traffic, including heavy lorry traffic, would divert away from London Road, reducing congestion there. An extension of Gavray Drive should be incorporated into the construction of the Bicester Chord.

6.38 **Mrs Greta Walker** (Obj 7)

6.38.1 Mrs Walker owns land parcel 01002, proposed to be acquired for the Scheme as exchange land. The Open Space Plan (Sheet 39 of CD/1.9) identifies, in green, land claimed to be Open Space that would be acquired for the Scheme; and, in blue, proposed exchange land including parcel 01002.

The Green Land

6.38.2 The Green Land is part of a large body (some 22.25 hectares) of undeveloped land known as The Gavray Drive Site, between the railway and Gavray Drive. The 1988 Bicester Local Plan identified this area for employment use and outline planning permission was granted for B1, B2 and B8 development there. In 1996 two detailed planning applications were made on 6.25 hectares of the land by Unipart, the car component makers; but those applications were refused. The local planning authority then changed the allocation to residential and in due course Gallaghers the developers applied for planning permission over the whole site for residential development. Planning permission was granted on appeal in about 2008.

6.38.3 A stream runs through the site with a flood plain on either side, which could not be developed. Oxfordshire County Council required some 3.4 hectares to be allocated as a County Wildlife Site. Cherwell District Council accepted these 3.4 hectares and treated them as part of the Public Open Space provision. All the land owned by The Norman Trust, including their part of the Green Land, was farmed until some six months before the Inquiry. And, between the submission of proofs of evidence

and Day 15 of the Inquiry, Gallaghers had blocked up various informal entrances to the site that had come into use, and parcels 02003 and 02004 had been returned to agriculture by ploughing.

- 6.38.4 The legal definition of "open space" is set out in the Open Spaces Act 1906: "any land, whether inclosed or not, on which there are no buildings or of which not more than one-twentieth part is covered with buildings, and the whole or the remainder of which is laid out as a garden or is used for purposes of recreation, or lies waste and unoccupied".
- 6.38.5 The Acquisition of Land Act 1981 ("the 1981 Act") defines (s19(4)) public open space as "any land laid out as a public garden, or used for the purposes of public recreation, or land being a disused burial ground." Although Chiltern seeks to distinguish between public open space and land used for purposes of public recreation, they are the same. This statutory definition should not be compromised by a policy reference (through Planning Policy Guidance 17) to "open space of public value". The question here is whether the land is used for the purposes of public recreation.
- 6.38.6 Chiltern have asserted that there is "clear evidence from numerous site visits". All that is provided is (in appendix 10 of CRCL/P/12/B) one photograph of a man and his dog, apparently taken in September 2010, straying from public footpath FP129/3; and, in CRCL/INQ/39, photographs from 2003 and 2008 of which one shows a person with a dog on the site in December 2008. These isolated snapshots are not enough to establish that the land qualifies as Public Open Space. Some sort of judgement must be made as to frequency of use: it cannot be right that evidence of two uses over a period of 7 years is enough to categorise the land as Public Open Space.
- 6.38.7 In any event, the land is privately owned, and uninvited members of the public who stray on to the land would be trespassing. It must be implicit in the definition of Public Open Space that the land should be lawfully used for the purposes of public recreation; Chiltern do not suggest that the definition of Public Open Space should include land which is "unlawfully used for the purposes of public recreation".
- 6.38.8 Chiltern argue that the Secretary of State regarded the land as "open space" in the context of permission 04/0297/OUT. However, nowhere in the Secretary of State's letter of 12 July 2006 (appendix 11 of CRCL/P/12/B) is it said that this land is public open space, and indeed on the attached plans Public Open Space is specifically marked and the land in question is not so marked.
- 6.38.9 It would be wrong to suggest a reverse burden of proof here. Chiltern emphasise material in the Environmental Statement but that contains (in this context) no more than in-principle, unsupported assertions.
- 6.38.10 The applicant has failed to conclusively establish or produce evidence that the Green Land (as shown on Sheet 39 of CD/1.9) does have public open space status as a matter of fact or law.

The Blue Land

- 6.38.11 If the Secretary of State were to find that the Green Land is Public Open

Space, it would then be necessary to consider whether the Blue Land would be equally advantageous.

- 6.38.12 If the Green Land was used by the public, common sense suggests that it would be used by those to whom it is most easily accessible, namely those who live on the neighbouring housing estates. Paragraph 26 of Appendix L of ODPM Circular 06/2004 (CD/5.19) defines "the public" for the purposes of section 19 of the 1981 Act. Chiltern brings no evidence that a wide cross-section of the public at large travel to this open space. The Green Land would instead be akin to a relatively small area "used predominantly by local people, perhaps from a particular housing estate". Paragraph 26 makes plain that "in such circumstances, the Secretary of State would normally expect Exchange Land to be equally accessible to residents of that estate".
- 6.38.13 Chiltern has identified the principal reasons for selecting the Blue Land, two of which are in dispute. Chiltern contend that the Blue Land is adjacent to the Green Land, and that the Blue Land is equally accessible for local residents who currently use the Green Land.
- 6.38.14 The Blue Land is not adjacent to the Green Land. It lies, in walking terms, a very considerable distance away – more than 1 kilometre.
- 6.38.15 As to accessibility, Chiltern argue it to be significant that those residents near the eastern end of Gavray Drive would be closer to the Blue Land than to the Green Land. But it is an ambitious argument, unsupported by evidence, that those at the eastern end should be included in the current users of the Green Land. Those at the eastern end might instead be thought to be very unlikely to travel to the Green Land when they are very much closer to the very large area of existing open space identified by Appendix B of document CRCL/R/OBJ7/1.
- 6.38.16 Common sense suggests that any existing users of the Green Land would come from housing estates nearest to it at the western end of Gavray Drive. And such residents would have to travel as much as 1.2 kilometres to get to the Blue Land.
- 6.38.17 Those currently using the Green Land would have no busy roads to negotiate. But those who would use the Blue Land would have to cross an extremely busy road characterised by fast-moving traffic, with a speed limit of 50 mph at the relevant point. It is common ground that this is a "primary traffic route", but there is no pelican crossing, footbridge or underpass near the crossing point. Access to the Blue Land is significantly more hazardous than access to the Green Land.
- 6.38.18 The Blue Land is not therefore equally accessible to local residents who it is claimed currently use the Green Land.

Conclusion

- 6.38.19 Mrs Walker's land should be allowed to remain in her ownership.
- 6.39 **Mr Alistair Buckley** (Obj 245)
- 6.39.1 Mr Buckley lives at Whimbrel Close, Bicester, and his property backs on to the route of the Scheme.

Noise and Vibration

- 6.39.2 The main living areas of Mr Buckley's property are the living room, conservatory and main bedroom, each of which is in the back half of the property some 20 metres from the track centreline.
- 6.39.3 Currently the line is used for freight only and some 2 or 3 trains pass each day. The Scheme would increase railway traffic to 4 passenger trains per hour, plus the current freight traffic, with a possible further increase to 12 trains per hour if East West Rail opens to traffic. This, coupled with the noise and vibration during and after construction, would greatly worsen living conditions at the property.
- 6.39.4 The conservatory is particularly vulnerable to external noise. It is frequently used, especially during the summer, when the doors must be kept open to ensure a comfortable temperature. Similarly, the bedroom windows must often be kept open on summer nights to ensure comfortable sleeping conditions. The trains are planned to run late, and the noise they make would cause continuous sleep disturbance.

Loss Of Privacy

- 6.39.5 There is currently a large tree in the rear garden which provides some degree of privacy from the railway. If that were removed as part of the Scheme then privacy would be lost, and noise barriers would not be able to restore it. It is unlikely that the noise barrier would be tall enough to prevent train passengers from being able to see clearly into the main bedroom. It was agreed in examination that such circumstances are common, although unappealing to Mr Buckley.

Mitigation

- 6.39.6 The following measures would therefore be necessary at the property if the Scheme were to proceed:
- a) A noise barrier should be provided;
 - b) An acoustic glazing system, with suitable ventilation, should be installed in the main bedroom and in the conservatory;
 - c) The large tree and other trackside vegetation at the rear of Whimbrel Close should be left in place and further trees planted to maintain privacy; and,
 - d) Blinds should be fitted in the conservatory.

6.40 The Oxford Green Belt Network (Obj 122)

- 6.40.1 The Oxford Green Belt Network ("the Network") is an organisation that concerns itself with Green Belt matters, working closely with parish councils in the Oxford area.

Water Eaton Station

- 6.40.2 The Scheme's greatest impact on the Green Belt would be felt at Water Eaton, in the narrow strip of countryside between Oxford and Kidlington. One of the five basic purposes of national Green Belt policy set out in PPG2 is to protect such vulnerable spaces so as to stop neighbouring settlements from merging and losing their identity.
- 6.40.3 The new station and parking facilities would stimulate more development in the area. Demolition of the grain silo would not amount to the very

special circumstances needed to justify the harm, loss of openness and inappropriate development that the Scheme proposals constitute. And one must ask whether the stated transport benefits of the Scheme could be achieved by siting the parkway station outside the Green Belt.

- 6.40.4 If the proposed Parkway station were allowed, there must be good access by public transport, to minimise car use. Parking charges should not encourage people to drive from other stations, nor should they encourage parking in nearby streets. Thought should be given to whether the proposed amount of parking is necessary. Car park decking is unacceptable in the countryside. Account should be taken of the effect at this site of the East West Rail Link, but not in terms of simply providing more parking spaces here.

Aggregates Depot

- 6.40.5 The Network opposes the proposed relocation of the aggregates depot, and asks whether it could be relocated onto currently developed land by reducing the size of the car park.

Further Development At Water Eaton

- 6.40.6 Oxfordshire County Council appears to want a parkway station, a materials recovery facility, an aggregates depot and a park and ride facility all at this Green Belt site. All of these are inappropriate development in the Green Belt. There should be much greater clarity in terms of which land uses can and should be accommodated at Water Eaton.
- 6.40.7 Chiltern seek to compulsorily acquire the present car park and bus terminal used by the County Council. The site was leased from local landowners in 2001 and the lease and other legal constraints limit the uses to which the site can be put.
- 6.40.8 A planning application made in the mid-1990s for a park and ride site at Water Eaton with 4000 square metres of offices on the silo site was dismissed at appeal because that proposal would harm the Green Belt in that it would be urban sprawl that would not preserve the rural setting of Oxford.
- 6.40.9 Any extension of industrial or commercial activity beyond the area now proposed for the actual parkway station would be extremely damaging and contrary to Green Belt purposes to the extent that no special circumstances exist to justify them.

Conclusion

- 6.40.10 The Water Eaton scheme should be allowed to proceed only if:
- a) The mix of land uses is clearly defined and their cumulative impacts properly assessed;
 - b) The scale of the parkway station and its parking have defined limits; and,
 - c) Development should not take place beyond the current brownfield area.

Conditions

6.40.11 Without prejudice to its objections, the Network submitted comments on planning conditions 18 to 25 proposed by the applicant (Obj/122/5).

6.41 **Campaign to Protect Rural England Oxfordshire** (Obj 195)

6.41.1 The Campaign to Protect Rural England ("CPRE") supports the broad objectives of the Scheme – tackling congestion, promoting more sustainable travel; and sustainable development.

6.41.2 CPRE's submissions are focused on the Oxford Green Belt and the Water Eaton proposals in particular, because:

- This is where the greatest potential impacts on the Green Belt are likely to be felt;
- The Water Eaton proposals raise complex planning and transport issues; and,
- The new Parkway station raises important "strategic" questions as well as local impact issues.

The Parkway Station And The Green Belt

6.41.3 The fundamental aim of Green Belt policy in Planning Policy Guidance 2 *Green Belts* is to prevent urban sprawl by keeping land permanently open. The creation and protection of the Oxford Green Belt as the unique setting of the historic city of Oxford is a key achievement of CPRE. But there are constant pressures on this fragile area of land, especially the relatively narrow gap of Green Belt between the built up areas of Kidlington and Oxford.

6.41.4 Welcome though the package of rail improvements might be, CPRE asks the Secretary of State to consider: is the Scheme proposal really the optimum outcome for the Green Belt in terms of openness and visual impacts?

6.41.5 The Parkway station would be a permanent feature in the Green Belt. It would be a very attractive multi-modal transport interchange for commuters and other travellers. There might be pressure for more parking spaces there, which could mean more decking in the car park and/or an increase in the car park area, both of which would be inappropriate in the Green Belt; and/or parking in nearby streets and settlements, which would be undesirable and hard to control.

The Parkway Station And The Existing Park And Ride Site

6.41.6 It is not at all clear how the new facility would be managed, even though the management of this development has direct and serious implications. This raises serious questions about the viability of the Water Eaton proposals: whether there would be enough parking space in the short term and in the long term, how the twin facilities should be managed and whether enough thought has gone into the planning of a major interchange and dealing with pressures for escalating parking demand. CPRE understood at the time of their appearance on 7 December 2010 that this was one of the key issues on which the County Council was seeking undertakings from Chiltern.

Aggregates Depot

- 6.41.7 This is one of only three rail depots in Oxfordshire for crushed rock, and the only one close to Oxford. This would be inappropriate development in the Green Belt, involving the permanent loss of agricultural land in the Green Belt. It is questionable whether it is appropriate for Chiltern to seek deemed planning permission for the benefit of another party. If the aggregates depot use ceased at some time in the future then the land should return to a use compatible with the Green Belt.

Materials Recycling Facility

- 6.41.8 CPRE would be seriously concerned if, as a consequence of the Scheme, the MRF site was displaced so as to generate further inappropriate development elsewhere in the Oxford Green Belt. As the MRF would primarily serve Kidlington and Oxford, its promoters may be forced to consider another Green Belt site. CPRE is aware of no plans to find an alternative location for a materials recycling facility, and contended that this should be examined by the Inquiry so that the planning position can be clarified.

***Wider Effects Of The Scheme On Kidlington/Water Eaton/
Northern Oxford***

- 6.41.9 It is crucial to consider the cumulative impacts of a number of proposals which are coming forward, and the current Inquiry is the best way to do that. Neither Cherwell District Council, nor Oxford City Council (whose common boundary passes through the area) have yet produced an up to date planning framework which addresses these matters meaningfully. Matters that should be considered include:
- a) Potential expansion of the Parkway station. The longer term transport issues should if possible be addressed by the Inquiry.
 - b) East West Rail. The effects of this scheme on the capacities of the station, parking and highways would have inevitable impacts on the Green Belt and the local transport network. East West Rail issues should be explicitly excluded at this stage and there should be no automatic assumption that Water Eaton Parkway can or should expand its capacity.
 - c) Other local development pressures. The Oxford Draft Core Strategy promotes the Northern Gateway development (around Peartree, close to the A34 and Water Eaton) as an employment site with up to 80,000 square metres of floorspace. The combined effects of that proposal and the Scheme on the surrounding transport network should be understood. And it should be made clear that, in view of its sensitive Green Belt setting, the Water Eaton parkway/ interchange should not be viewed as any form of future employment hub.
 - d) Reconfiguration of the local transport network. The Parkway station would provide an excellent opportunity to undertake comprehensive improvements to the whole public transport and rights of way network in this area.

Conditions

- 6.41.10 CPRE submitted a list of comments and ideas for planning conditions (Obj 195/4). These refer to:
- Design, external appearance and materials, and landscaping.
 - Aggregates depot.
 - Land restoration on cessation of use.
 - Car park charging and management.
- 6.42 **Paul and Denise West** (Obj 12)
- 6.42.1 Paul and Denise West own about two hectares of land to the north of the Birmingham/London railway and to the east of the Oxford/Bletchley railway, close to the crossing point of those two railways. The land is currently grassed and unused. Footpath FP129/3 leads northwards from Gavray Drive across the line of the Scheme and under the Birmingham railway before following the western boundary of the Wests' land to beyond its northern limit. Mr West would like the land to become woodland and grassland, with public access, managed by Bicester Town Council (the Council has no current interest in the land). The 1987 *South East Bicester Development Brief* (Obj 12/5) and the 1988 *Bicester Local Plan* (Obj 12/3) both refer to this use of the land. Currently the land is subject to trespass, vandalism and use by motorcycles. Mr West described it as a dumping ground. He wants to fence it. Currently the land has no access for four-wheeled vehicles.
- 6.42.2 Footpath 129/3 is to be replaced by Work No. 8, a footbridge over the Bicester Chord. This will make access to the land even more difficult. Cyclists, disabled people, the elderly and mothers with pushchairs would find it dangerous to negotiate a metal bridge with several flights of stairs.
- 6.42.3 The Scheme would cross an area intended for open space in the proposed development between the Birmingham railway and Gavray Drive. Consideration should be given to a tunnel beneath the Bicester Chord and the Birmingham railway. Such a tunnel could accommodate the cycle/footpath with no interruption to any member of the public. It would also provide proper access to the land and for contractors maintaining open space under the control of Bicester Town Council. The tunnel might also accommodate Langton Brook, and footpath FP129/3 could be diverted to the new route.
- 6.43 **Mrs Rosemary Harris** (Obj 213)
- 6.43.1 Mrs Harris lives on Woodstock Road, adjoining Wolvercot Tunnel. Land parcel 26016 is part of her property, which Chiltern seek to acquire for ground anchors as part of the proposed works to the tunnel.

Business Case

- 6.43.2 The South East Plan Regional Spatial Strategy was revoked by the Secretary of State pending its abolition although this revocation is now subject to legal challenge. Consequently, Oxford City Council and Cherwell District Council have each reduced their housing targets by one third. As the level of growth forecast by the Regional Strategy is now known to be too optimistic and local authorities are setting much-

reduced targets, then the “need” based on demand is hard to justify.

- 6.43.3 It is well known that Oxford relies heavily on about half its workforce commuting from outside Oxford. Businesses report difficulty in recruiting and retaining staff. Encouraging Oxford residents to commute to London rather than work in Oxford will worsen the problem. And short journeys are more environment-friendly than long ones. The proposed station at Water Eaton is not within easy and safe cycling or walking distance of the majority of its proposed users.
- 6.43.4 It is hard to justify the high cost of the works to Wolvercot Tunnel. Funding for East West Rail is doubtful due to its projected huge costs, so the funds for lowering the track in Wolvercot Tunnel would be better spent on mitigating road congestion in the Oxford area.
- 6.43.5 The business case is therefore not robust.
- 6.43.6 No evidence has been presented to show that the East West Route has any importance to the national economy. No compelling case has been made for Phase 2A and it is that phase which requires property from Mrs Harris’ property. Instead, the matter rests on a presumption that, at some undefined time in the future, the route may be “considered”. Phase 2 should be struck out.

Noise

- 6.43.7 Chiltern intends to agree noise mitigation measures with the local authority, to ensure residents are adequately protected. It is well documented that Oxford City Council does not adequately address noise disturbance, and so Chiltern should agree noise mitigation measures instead with Engage Oxford and Oxfordshire County Council.
- 6.43.8 Maintenance works on the track have been carried out without notice to residents, and have caused disturbance at night. Construction noise mitigation will be useless. Mrs Harris currently rents part of her house to students, and they need the house to be a quiet place to study during the day; if there were 24-hour construction working on the line they would have to find alternative accommodation even if the noise level were such that they were able to study during the day. Loss of their rent could bankrupt Mrs Harris.
- 6.43.9 If the Scheme is allowed to proceed:
- a) A cut and cover tunnel should be provided;
 - b) The track should not be placed on concrete slabs;
 - c) Train speed should be limited to 30 mph; and,
 - d) The number of night time freight trains should be limited.

Other Issues

- 6.43.10 Mrs Harris’ property is at risk of compulsory purchase by Oxford City Council as a result of its proposed Northern Gateway development. A statutory notice was published in the local press in 2008. That proposal is part of the draft Core Strategy prepared by the Council, the subject of a re-opened examination. There would be little point in preparing a proper and costly objection to the Scheme if the City Council is to compulsorily purchase the property anyway.

- 6.43.11 The railway is in a cutting that passes close to Mrs Harris' house. It is vital that the cutting is not de-stabilised by the works. A special study and method statement should be provided. An independent surveyor should be appointed to identify harm to the building that occurs during the works, funded by Chiltern.
- 6.43.12 No bat survey has been carried out for Chiltern in Wolvercot Tunnel during the roosting period. No works to the tunnel should be carried out until the survey has been completed during the roosting period, and the results properly taken into account.

Conditions

- 6.43.13 In her statement of case, Mrs Harris suggested planning conditions to ensure there would be no net effect on habitats and wildlife, with arrangements for monitoring and long term maintenance of mitigation measures.
- 6.43.14 Without prejudice to her objection, Mrs Harris submitted as a written representation a list of suggested planning conditions (Obj/213/7). These referred to:
- Definition of Mrs Harris' property as an "eligible" or "sensitive" building;
 - Mitigation measures to at least match those set out in the Crossrail Noise and Vibration Mitigation Scheme (Attached to Obj/213/7. Mrs Harris does not indicate any areas of mismatch. The Crossrail scheme is described in its paragraph 1.2 as being intended to control noise and vibration from within the construction site.) and to match performance thresholds applied in Germany (no examples were provided);
 - Noise and vibration levels not to exceed stated limits, and in the event of non-compliance, operations to stop until compliance can be assured.
 - Phase 2 works to be accompanied by noise and vibration mitigation appropriate to the full future capacity of the line.
 - Noise and vibration mitigation to be provided where needed, regardless of cost.
 - Construction works near the Wolvercot Tunnel.
 - Information provision and consultation.
 - Structural surveys of buildings near the Scheme.
 - Notice of works.
 - Compensation for loss of business arising from the construction of the Scheme.
 - No night time or out of hours construction work.

Suggested Modification To The Draft Order

- 6.43.15 Mrs Harris made the following submission by written representation. Regulation 7 of *The Noise Insulation (Railways and Other Guided Transport Systems) Regulations 1996* identifies that an "eligible building" is not one with respect to which a notice to treat has been or is intended to be served for its acquisition, or with respect to which a vesting declaration for its acquisition has been or is intended to be made. Such

a notice has been served on Mrs Harris, whose building is therefore not an “eligible building”, and therefore entitled to neither noise and vibration mitigation nor compensation in that respect. The draft Order would allow Chiltern to acquire only a (defined) partial interest in Mrs Harris’ property. This creates a loophole in that Mrs Harris is not entitled to compensation or mitigation for noise and vibration whether or not Chiltern exercises any rights over her land. The Order should be modified to specifically require the promoter to acquire a full interest in Mrs Harris’ property if the promoter exercises any rights whatsoever over her property.

6.44 Wendlebury Parish Council (Obj 286)

- 6.44.1 Wendlebury Parish Council does not oppose the principle of the Scheme.
- 6.44.2 Footpaths and bridleways in and around Wendlebury are all used on a very regular, if not daily, basis. The Council objects to the closing of any right of way.
- 6.44.3 Work No. 11 would divert Langford Lane, and its modified form is likely to increase traffic in the village, where traffic is already a problem.
- 6.44.4 Wendlebury currently suffers from in house flooding at times of high rainfall and it is essential that the Scheme does not worsen that. There is a pond in the field where Work No. 11 is proposed: the land here is very waterlogged and the new access to Merton Grounds must not make flooding in the village worse.
- 6.44.5 Noise from trains reaches the village, and the scheme would increase noise pollution. Effective mitigation, or compensation, should be provided.
- 6.44.6 The Scheme would prejudice the future of Wendlebury Stables. A satisfactory solution should be reached. Noise mitigation there is the main area of concern of the Parish Council.
- 6.44.7 Wendlebury Meadows SSSI must not be affected in any way by the Scheme.

6.45 Bus Users UK Oxford Group (Obj 205)

- 6.45.1 Bus Users UK is a non-statutory body founded in 1985 to represent the passengers of deregulated and privatised bus services outside London.
- 6.45.2 Document CRCL/INQ/41 is a statement of common ground between Chiltern and Bus Users UK Oxford Group, dated 7 December 2010. There is agreement about:
 - The overall Scheme proposal;
 - East West Rail;
 - Water Eaton Parkway Station;
 - Bicester Town Station;
 - Oxford Station; and,
 - Bus Industry Liaison.
- 6.45.3 The objections of Bus Users UK are now as follows:
 - a) New bus routes will be needed to carry passengers to and from

- the railway at Water Eaton Parkway. This would attract more passengers to the railway, reduce the amount of Green Belt land needed for parking at Water Eaton and avoid increases in congestion on "A" roads west and northwest of Water Eaton. Chiltern should provide bus services between Water Eaton Parkway station and destinations at Woodstock, at Witney and at Wolvercote.
- b) Bus service X88 connects Brackley to Bicester, and is subsidised by Oxfordshire County Council. An increased service frequency would encourage more Brackley people to use trains from Bicester Town, with their faster journey time to London than is available from Bicester North. The current franchise arrangement does not preclude a further subsidy, and Chiltern should provide that.
- c) London Road level crossing in Bicester would, with the Scheme, be closed for 40% of the time. Each closure would be for two minutes. This, and the resulting traffic congestion, would significantly affect journey times and timetabling of buses. Chiltern underestimates the effect this would have on walking, cycling, buses and other traffic. Traffic queues would reduce road vehicle engine efficiency and greatly increase emissions around the crossing. There should be an air quality monitoring station at the site to record the frequency and extent to which public health limits are breached, but none is proposed. Chiltern makes too much of the fact that the level crossing is near a conservation area. The conservation area ends nearly 100 metres away from the crossing. Non-listed buildings could be cleared to make room for a bridge, as Chiltern proposes for a car park. There is no reason why a bridge here could not be exactly the right size for its function, or why a good design could not be prepared that would make its visual effect considerable and positive. A bridge should be provided as part of the Scheme. Even a foot and cycle bridge, while not directly reducing vehicle emissions from queuing traffic, would encourage environmentally-sustainable travel, and integration between sustainable modes is among Project Evergreen 3's objectives. The omission of a bridge is inexplicable and unacceptable.
- d) Work No. 13 would provide a new bridge for bridleway BW157/4. This would still cause unreasonable diversion of footpath FP318/6 which currently links Charlton-on-Otmoor to Weston-on-the-Green but is to be stopped up and diverted to the new bridge at Oddington Crossing, 1000 metres away. A footpath diversion by a kilometre is not "reasonably convenient" (as sought by section 48(2) of the Transport & Works Act), irrespective of the number of walkers involved. Inconvenienced walkers might be tempted to take unauthorised short cuts across the fields to the diverted BW157/4. For almost six miles between Bicester and Islip, no public road links villages on opposite sides of the railway, and so retention of non-motorised rights of way across the railway

are all the more important. A new footpath should be provided, to link bridleway BW157/4 and footpath FP318/6 in order to create a new route between Charlton-on-Otmoor and Weston-on-the-Green. Such a path might run westwards or north-westwards from the diverted BW157/4 in the area of Ordnance Survey grid reference SP552173 to a point on FP318/6 that is mutually convenient for walkers and the farmer. It would be entirely unreasonable to stop up the railway crossing for FP318/6 unless a new direct footpath between Charlton and Weston is provided.

6.46 **Cyclists' Touring Club** (Rep 12)

- 6.46.1 The Cyclists' Touring Club ("the Club") generally supports the Scheme. Their objections are as follows.
- 6.46.2 Wheeling ramps should be provided on footbridges accessed only by steps.
- 6.46.3 Work No. 8 and Work No. 9 are proposed as footbridges, but at each site subways would be more convenient for cyclists. Work No. 9 (Tubbs Lane) is on National Cycle Network Route 51 between Milton Keynes and Oxford.
- 6.46.4 London Road level crossing is a skew crossing, presenting an increased risk of cyclists falling when a tyre meets a vertical edge running close to the direction of travel. The desirable minimum angle of skew is 60° but that at London Road is 45° and should be increased. In examination, the Club said that it has no record of cyclists falling at the existing level crossing in London Road, but was aware of accident clusters associated with tramlines at Sheffield and Blackpool. The Club was unable to cite an authoritative design standard for skew level crossings used by cyclists.
- 6.46.5 Oxfordshire County Council should work to improve links between car parking near Bicester Town station and the A41, thus reducing traffic levels in Bicester and creating better conditions for non-motorised traffic.
- 6.46.6 Water Eaton Bridleway 4 crossing closure would result in an unsatisfactory diversion alongside the A34. Noise and air pollution, debris, parked motor vehicles including food vendors, inadequate width and poor maintenance of the surface and adjacent vegetation all discourage cycling there.
- 6.46.7 Cycle parking should be provided at each of the new or refurbished stations.
- 6.47 **Mr Jesse Benjamin Honour, Mrs Margaret Honour and Mr Jesse Scott Honour** (Objs 44, 45 and 46)
- 6.47.1 The Messrs Honour and Mrs Honour ("the Honour family") own four relatively small enclosures of pasture land to the south-east of the railway and with frontage to the north-east side of Mansmoor Road (parcels 11008, 11009, 12002 and 12003). This is part of a larger but disparate holding extending to only 19.63 hectares, with land near Charlton-on-Otmoor and Merton as well as in Mansmoor Road.
- 6.47.2 The imposition of level crossing closures has caused bad feeling between neighbouring landowners and occupiers. The Honour family is concerned

that land would be compulsorily acquired from them merely to provide access and to meet the needs of a larger neighbouring landowner, rather than for the purposes of the Scheme.

6.47.3 The Honour family objects to the following aspects of the Scheme proposals:

- a) Mansmoor Road would be temporarily used for construction traffic associated with Work No. 13. The load bearing capacity of Mansmoor Road should be upgraded before work starts.
- b) Noise mitigation should be provided.
- c) There should be measures to minimise disruption to the Honour family's livestock enterprise during construction and thereafter.
- d) There should be clear mitigation measures to minimise contamination and damage to the use of the Honour family's land and buildings by noise, vibration, dust and dirt during the construction of the Scheme.
- e) There is no compelling case for the acquisition of either rights or property from the Honour family.
- f) There is not enough evidence to justify interfering with the Honour family's human rights by way of property ownership.

6.47.4 It was agreed in examination that items 4, 5 and 6 of the Honour family's objection (as set out in document Obj/46/1, and which are not included in paragraph 6.47.3 of this report) are satisfied by Chiltern's rebuttal document (CRCL/R/Obj44/45/46). It was indicated for the Honour family at the Inquiry that the costs application suggested at item 10 of document Obj/44/1 would not be pursued.

6.48 **The Freeman Of Oxford** (Obj 314)

6.48.1 The Freeman of Oxford ("the Freeman") were given their Charter by King Alfred in around 885 AD. In order to keep their war horses and their cattle they were given grazing rights on Port Meadow. The Freeman retain those rights, and exercise them today. The Freeman's appearance at the Inquiry also included evidence of the Port Meadow Protection Group.

6.48.2 The published Scheme includes the grant of vehicular rights of access over the Meadow between Walton Well Road and the Trap Grounds allotments. Such rights of access would not be in the interests of the Freeman, and the City Council has no power to concede such rights, since those rights lie with the Freeman.

6.48.3 If the path were regraded (or the previously-proposed car park built at Trap Grounds allotments), the absorptive power of the land would be reduced and so would the area of the floodplain of which Port Meadow is part. This would be contrary to Planning Policy Statement 25 *Development and Flood Risk* and the Freeman object to any works that would have such an effect. Creeping marshwort, whose presence is one of the reasons why Port Meadow is a Special Area of Conservation, can be harmed by summer floods and that is another serious harm that could be brought by the proposed works on the path.

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- 6.48.4 The Freeman do not object to temporary access being taken for three months to build the path (notwithstanding their objections to the path itself). It would be preferable for the work to be carried out in the winter (1 November to 1 May) when livestock numbers are at a minimum.
- 6.48.5 The Freeman objected to Chiltern's proposal in the published Scheme to create rights of access across parcels 29010, 29011 and 30009 at Port Meadow (section 9 of document Obj/314/1). [That proposal was withdrawn by Chiltern during the inquiry (4.5.33) and so there is no need to report details of the objection to it.]
- 6.49 **The Wolvercote Commoners' Committee** (Obj 321)
- 6.49.1 The Wolvercote Commoners' Committee ("the Committee") was set up on 6 March 1929 to take over the functions of the former Parish Council with respect to the various commons in Wolvercote. Records and archaeological evidence show the Committee's forebears to go back to 1279 and that the land was communally grazed in the Bronze Age. Wolvercote Common is at the north end of Port Meadow.
- 6.49.2 The Committee's objection includes:
- 6.49.3 a) The proposal in the published Scheme that vehicles should be permanently authorised to drive on Port Meadow. That proposal was withdrawn by Chiltern during the inquiry (4.5.33) and so there is no need to report the objection to it.
- b) Any improvement to tracks on Port Meadow, such as that leading from Aristotle Lane bridge, would be regarded by the Committee as a "disimprovement" to Port Meadow.
- c) If land parcels 29009, 29015 and 29018 are occupied by Chiltern while the Scheme is being built, the Committee would expect compensation for loss of grazing rights.
- 6.50 **Grundon Waste Management Limited** (Obj 102)
- 6.50.1 This company ("Grundon") was founded in 1929 and is the largest privately owned waste management group in the UK.
- 6.50.2 Grundon manages a small proportion of Oxfordshire's municipal solid waste and has nearly 30% of the commercial and industrial waste collection market. Of the quantity that Grundon collects, around 30,000 tonnes per year is of source-separated recyclable material that requires processing through a material recovery facility ("MRF") and the remainder, some 150,000 tonnes (of which 100,000 tonnes would be processed at Water Eaton), is mixed waste which is also capable of being separated by a MRF into recovered and residual streams.
- 6.50.3 Grundon has no facility in Oxfordshire to manage those wastes and uses a MRF elsewhere for the recyclable element, and landfill for the remainder. To increase the recycling rate of commercial and industrial waste it would be necessary to put the mixed waste through a MRF and if that were done a recovery rate of some 30% is likely to be achieved. Grundon proposes two new MRFs in Oxfordshire: a small one with 50,000 tonnes per year capacity on former allotment land near Banbury (for which a planning application has been made) and a large central facility near Oxford. The Banbury site would accommodate a new purpose-built
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building, and is not located on an industrial or business park.

- 6.50.4 The Oxford facility would have an annual capacity of 150,000 tonnes.
- 6.50.5 The combined capacity of the two MRFs would be likely to allow 36,000 tonnes of waste to be diverted from landfill in 2013 and would save Grundon £3.3 million in that year.

The Site

- 6.50.6 Grundon intends to build the Oxford MRF on part of the site in the Green Belt where the Scheme would locate the Water Eaton Parkway station and its associated car park. Grundon first became aware of the site's potential availability in 2005 and in 2006 contracted with the owner to buy the site on grant of planning permission. A planning application was submitted on 9 August 2007.
- 6.50.7 The County Council planning officer's report, dated August 2008, is in Appendix 6 of document Obj 102/3. The officer found that there are planning policy requirements for waste to be managed close to its source, that there is a particular need for a facility to serve the recycling needs of Oxford and nearby settlements and that the site is well placed in this respect. The proposed MRF, with its capacity of up to 150,000 tonnes of waste per year, would make a considerable contribution to the capacity needed and there are no alternative sites that are not also in the Green Belt or significantly more distant. The proposed capacity would only meet the catchment recycling need until 2018 and more capacity would be needed in the area after that date.
- 6.50.8 The officer's report also identifies that, by virtue of the removal of the grain silo, the overall visual effect of the MRF proposal (without the Scheme) would be neutral, and the impact of the proposed MRF building on the openness of the Green Belt (without the Scheme) would be broadly neutral.
- 6.50.9 Planning permission, subject to conditions, was granted on 19 February 2010 and Grundon completed the land purchase on 1 March 2010. This was the culmination of a process which had taken over four years and substantial expense and investment. Grundon now wishes to build the MRF and bring it into operation as soon as possible.
- 6.50.10 Appendix 2 of document Obj 102/3 shows the Non Technical Summary ("NTS") from the Environmental Impact Assessment prepared for the proposed MRF. Plans on pages 1 and 2 of the NTS show the MRF site location and its relationship to the existing park and ride site at Water Eaton. The MRF site comprises the grain silo site.
- 6.50.11 Finding an alternative site would be very difficult. The MRF building must have an internal height of 15 metres, with a large floor space with no pillars. Buildings suitable for re-use as a MRF are rare, and standard industrial units are not tall enough. It would be prohibitively expensive to buy a serviceable industrial unit to demolish so as to make way for a MRF. And clear sites of the necessary size (1.5 hectares or more) are also hard to find. Setting up a MRF is costly and so must be on a permanent basis, whereas a large proportion of the sites that come available – such as in old quarries – are temporary. The Water Eaton site is permanent and has good road access. Proximity to the railway is

not a consideration because the recovered output from a MRF is typically sent to many end users, often not served by rail; and the residual material would be sent to landfill or to the proposed energy from waste incinerator at Ardley, a few miles away and without rail access.

Alternative

- 6.50.12 Chiltern's Scheme would use the grain silo site only for parking and traffic circulation and not as an integral part of the Scheme. Therefore, there is a possibility of alternatives to the Scheme that would not require the use of the grain silo site, but those do not appear to have been considered: Chiltern has only considered the relocation of the rail aggregates depot.
- 6.50.13 A suggested alternative to the Scheme proposal is shown in Appendix 8 of document Obj 102/3. This would modify the layout and access of the MRF, redistributing parking associated with the Scheme and changing some elements of the on-site road layout and cycle parking. The MRF would be retained in its approved position although its site boundary would be modified and its internal layout changed. This would result in the loss of 672 of the parking spaces proposed by the Scheme. Car park decking would be added between the MRF and the railway, on the southern part of the site's frontage to the A4165 Oxford Road, and over part of the southern area of the existing park and ride facility. There would be some expansion of ground-level parking. Altogether some 850 spaces could be provided in this way.
- 6.50.14 The MRF would be only a slight barrier to pedestrian circulation on the park and ride site, adding an extra walk of some 50 metres between the station and those parking spaces beyond the MRF, and safety need not be compromised.
- 6.50.15 As to the effect on the Order, the Alternative falls entirely within the lateral limits of deviation and limits of land to be acquired or used shown on the Deposited Plans and Sections, and the vertical limit does not apply to it. It does not affect the purposes for which land may be acquired. The only amendment precipitated by the Alternative is to remove the land numbered 23009, 23010 and 23011 from the land which may be compulsorily acquired in Schedule 2 to the Order.

On-Going Need

- 6.50.16 Although the Oxfordshire Minerals and Waste Development Framework is at an early stage of development, the status of the MRF site in the MWDF is not of great relevance as the site now has planning permission for a strategic waste facility.
- 6.50.17 Viridor, a waste contractor, has recently been awarded a contract for the treatment of residual municipal solid waste in Oxfordshire that is not to be recycled. The recycling of MSW is undertaken separately by each District Council awarding its own contract on a short term basis of 5 to 7 years: these contracts become available on a regular basis. Given that this recycling is largely undertaken outside Oxfordshire, due in part to a lack of facilities, a central facility in the County would be well-placed to win at least some of this work. The proposed Ardley energy from waste facility, for which Viridor is the preferred bidder, will handle MSW and

commercial and industrial waste after recyclables have been removed and would be an ideal accompaniment to the Grundon MRF.

- 6.50.18 The interim Oxfordshire County Council Waste Needs Assessment (June 2010, appendix B to CRCL/R/Obj102) identifies 310,000 tonnes per year of further recycling and composting capacity from facilities with planning permission but not yet built, which could meet the gap between current capacity and required capacity until 2020. That further approved capacity is principally comprised of the Grundon MRF and a proposed MRF at Finmere Quarry, and if the Grundon site fell then the forecast capacity would reduce to 160,000 tonnes per year.
- 6.50.19 It is also the case that, of the three substantial MRF/recycling facilities identified by Chiltern as serving central and south Oxfordshire, two do not currently handle the same waste type as the proposed MRF (that is, commercial and industrial and MSW), and the third (Finmere Quarry) was more than 20 kilometres away from the Grundon site and its permission to handle commercial and industrial waste will expire in 2020 (following a recent refusal of an application to extend the existing planning permission. Finmere has not yet been built and, given the time needed for it to be built, the short life it would then have (some 7 years) and the fact that its parent company is on the market, the circumstances cast doubt on the likelihood that a MRF would be developed there at present.
- 6.50.20 Grundon considers there to be no practical and suitable alternative sites for the company's MRF. Chiltern's case is that suitable alternatives will come forward in the future. Grundon expects that, if sites were to become available in future they would have significant environmental and financial disadvantages in comparison with the current site. It would be reasonable to assume that a suitable alternative site may not be identified, and permission obtained, for several years.

Conclusion

- 6.50.21 There is no realistic alternative site for Grundon's MRF and, in any event, the MRF could easily co-exist with the Scheme proposals. Accordingly, the Order should not authorise the compulsory acquisition of the site of Grundon's MRF.
- 6.51 **The Berkshire, Buckinghamshire and Oxfordshire Wildlife Trust** (Obj 211)
- 6.51.1 This Wildlife Trust ("BBOWT") was established in 1959 as a naturalists' trust. It now manages 88 nature reserves across the three counties.
- 6.51.2 BBOWT's initial objection was made on the following grounds:
- The Scheme would alter access to Woodsides Meadow Nature Reserve, and BBOWT is not satisfied that the new arrangement would be adequate;
 - Ecological impacts on:
 - The Oxford Meadows special area of conservation;
 - The Wendlebury Mead and Mansmoor Closes Sites of Special Scientific Interest;
 - Increases in nitrogen oxides and nitrogen deposition at the

- above sites and various other designated sites;
 - o Gavray Drive Meadows Local Wildlife Site;
 - o Wendlebury Ponds;
 - o Protected species: bats and great crested newts; and,
 - o Priority species: brown hairstreak and tassel stonewort.
- 6.51.3 BBOWT is satisfied that its concern regarding brown hairstreak and tassel stonewort would be met if two planning conditions it identifies were attached to the Planning Direction, and Chiltern has also proposed the same conditions (numbers 27 and 28). Both are species of principal importance under section 41 of the Natural Environment and Rural Communities Act 2006. The brown hairstreak butterfly is identified in the Environmental Statement as present at Gavray Drive Meadows county wildlife site. It lays its eggs on blackthorn, which is present in the Scheme boundaries there, and measures should be taken to replace blackthorn lost to the Scheme. Tassel stonewort is found on bridleway BW157/4, between Mansmoor Road and the Beebont level crossing, and may be disturbed by the Scheme. It should be protected.
- 6.51.4 Document Obj211/4 was confirmed at the Inquiry as superseding document Obj/211/2 (also marked CRCL/P/Obj/211/A). BBOWT confirmed at the Inquiry that it has no objection regarding the Scheme's effect on bats.

Access to Woodsides Meadow Nature Reserve

- 6.51.5 This nature reserve is part of the Wendlebury Meads and Mansmoor Closes SSSI. That SSSI is designated (document Obj211/3) due to the presence of traditionally-managed unimproved neutral meadows. BBOWT bought Woodsides Meadow in 1989 to manage the site for nature conservation. The purchase included a right of access over parcels 12003 and 11008, between Mansmoor Road and the "Beebont" level crossing. BBOWT must take access to Woodsides Meadow, and take stock (by trailer or by herding) and machinery such as mowing equipment to it, in order to manage the site appropriately to maintain the conservation interest for which it was designated, in accordance with s28E of the Wildlife and Countryside Act 1981 as amended. There is no other suitable means of access available to BBOWT.
- 6.51.6 The Scheme proposal would close the level crossing currently used by BBOWT and provide another access, via Work No. 13. But the distance along that access from Mansmoor Road to Woodsides Meadow is much greater than the current arrangement (CRCL/R/Obj211/1 illustrates this). The longer route, which is unfenced (unsuitable for herding) and on softer ground (unsuitable for trailers), will bring with it a need for maintenance, which should be addressed effectively and not at BBOWT's expense. This has been the subject of discussion with Chiltern, but was not resolved by the end of the Inquiry. This issue should be addressed through the Order.

The Oxford Meadows Special Area Of Conservation

- 6.51.7 BBOWT is satisfied that an impact on creeping marshwort from air pollution is unlikely to arise as a result of the Scheme. BBOWT is

concerned about the impact of increases in nitrogen arising from the Scheme on the meadow habitat of Port Meadow with Wolvercote Common and Green SSSI.

The Wendlebury Mead and Mansmoor Closes Sites of Special Scientific Interest

- 6.51.8 The Scheme proposes a private means of access on parcel 11005. This would be a new track on the SSSI. 675 square metres of ecologically valuable habitat would be lost from the SSSI. Whilst habitat creation is proposed over an area of 1450 square metres as compensation, it is unlikely that habitat of the same quality as the SSSI could be achieved because the compensatory site has compacted soil that lacks the nutrients found in grazed land, such as parcel 11005.
- 6.51.9 Document Obj 185/3 identifies an alternative route which would provide access for BBOWT to Woodsides Meadow, as well as appropriate access for the neighbouring landowners, whilst also avoiding damage to the SSSI (6.55.46). The Scheme should be modified to provide sufficient assurance of suitable replacement access for BBOWT to Woodsides Meadow.

Nitrogen

- 6.51.10 As identified in the email attached to CRCL/INQ/48, air pollution from the Scheme would result in critical loads of nitrogen deposition being exceeded at Wendlebury Meads and Mansmoor Closes SSSI, at Hook Meadows and the Trap Grounds SSSI and at Port Meadow and Wolvercote Common and Green SSSI. NOx emissions will also make a significant contribution to the total concentration of NOx at these SSIs. The environmental statement (CD/1.16) says at section 8.6.2 that regular monitoring and sampling would be undertaken, followed by appropriate mitigation; but the evidence of Chiltern's ecology witness (CRCL/P/10/A, paragraph 2.33) is that no monitoring or mitigation is proposed. The latter approach would be inconsistent with the duty placed on statutory undertakers and Government departments by s28G of the Wildlife and Countryside Act 1981 (as amended) to take reasonable steps to further the conservation of SSIs.

Gavray Drive Meadows Local Wildlife Site

- 6.51.11 This site ("the LWS") is designated for its lowland meadow habitat. It receives protection through the planning system. Paragraph 9 of Planning Policy Statement 9 *Biodiversity and Geological Conservation* ("PPS9") refers to the role such sites have to play, and the need for criteria-based policies to be established in local development documents. Saved Policy C1 of the Cherwell Adopted Local Plan 1996 refers to the protection of sites of local conservation value and says: "The potential adverse effect of development on such sites will be a material consideration in determining planning applications".
- 6.51.12 The Scheme proposal would take land from the LWS and bring an area of the LWS to the east of Charbridge Lane into open access to provide replacement open space. The most effective management for Gavray Drive Meadows would be a late summer hay cut followed by aftermath grazing; but Chiltern propose open public access on this part of the LWS

and say in the *Replacement Open Space, East of Charbridge Lane, Bicester, Landscape And Ecology Enhancement Strategy* (CRCL/P/12/B, appendix 13) ("the Landscape and Ecology Enhancement Strategy") that this would mean that grazing is not practical.

- 6.51.13 The Landscape And Ecology Enhancement Strategy would bring a small area of the LWS into better (but not optimum) management, but would also introduce an unknown degree of recreational pressure onto this site. And there is no indication of the duration of the Strategy, and so it is not possible to assess its long term effect. Nor is it clear who would pay for it. Alternative land (of lower existing biodiversity value) should be identified to provide the replacement open space, thus avoiding further negative impacts on the LWS. That would be in line with Key Principle 6 of PPS9:

"The aim of planning decisions should be to prevent harm to biodiversity and geological conservation interests. Where granting planning permission would result in significant harm to those interests, local planning authorities will need to be satisfied that the development cannot reasonably be located on any alternative sites that would result in less or no harm."

- 6.51.14 Implementation of the Landscape And Ecology Enhancement Strategy should be a condition of the approval of the Scheme, and the Strategy should include a hay cut followed by aftermath grazing for the replacement open space. The LWS field to the south should be subject to the Landscape And Ecology Enhancement Strategy.

Conditions

- 6.51.15 Without prejudice to its objections, BBOWT submitted a list of suggested planning conditions (Obj/211/8). These referred to:

- Landscape and Ecology Enhancement Strategy
- Priority Species.

- 6.52 **Mr A Basson and Leda Properties Limited** (Objs 51 and 52)

- 6.52.1 The cases of Mr Basson and Leda Properties Limited ("Basson and Leda") were presented together. Mr Basson owns land parcels 04037, 04038 and 04041, on the south west side of London Road, Bicester. Leda owns Langford Park Farm, Bicester which includes, among others, land parcels 04a003, 04a004 and 05017. Appendices 1 and 2 of document Obj51&52/1 show land owned by Basson and Leda at London Road and at Langford Park Farm.

Planning Application

- 6.52.2 The London Road site is the subject of an application by Leda for outline planning permission for 140 dwellings. The application was registered in December 2009. The development proposal has since been the subject of discussion with the local planning authority, hydraulic analysis requested by the Environment Agency (including flood compensation works at Langford Park Farm), and archaeological field survey. The application was reported to the relevant Committee of Cherwell District Council on 6 January 2011 with a recommendation for approval. The Committee deferred its decision, pending further work on the drainage

design for the site.

Effect Of The Order On Leda's Proposals

- 6.52.3 The Scheme would have a significant effect on Leda's current development proposals and on any other proposals to make the land available to meet the need for housing. It would reduce the land available for much-needed housing. The inclusion of Parcel 04037 would impact not only on the number of dwellings (at least eight would be lost) but on the drainage proposals, open space and planting, and a turning head. The whole design ethos of the site would be affected, and the design could not readily be altered to accommodate the loss of the land parcel.
- 6.52.4 Cherwell DC supports the proposed development because it would enable them to meet their 5-year housing target and because it would provide a significant amount of affordable housing to meet local needs. If Parcel 04037 were included in the Order, release of the London Road site for housing would be delayed, and fewer units could be provided. The delay would be substantial, perhaps 5 years, and that would prejudice the development because of its relationship to the 5-year target.
- 6.52.5 It was agreed in examination that if Leda or their successor were temporarily held up on that part of the London Road site near parcel 04037, compensation would be payable. And meanwhile, development could proceed elsewhere on the site. Access to the site does not depend on parcel 04037. But the Order Scheme would mean that land at the back of the site (i.e. parcel 04037) would become available very late in the development process, drawing construction traffic through finished development, which would be bad for sales.

Alternative to Parcel 04037

- 6.52.6 Chiltern seeks to acquire parcel 04037 to provide access to a construction site. Appendix E of document Obj51&52/2 shows an alternative arrangement suitable to meet the needs and aims of Chiltern. The alternative route follows an unused footpath/cycle track to the south of Talisman Business Park, on land to the north of the London Road site. If Chiltern's construction site access followed this existing and unused path, there would be a need to acquire only a very small part (some 500 square metres) of the London Road site, and that loss would have no impact on the proposed drainage system there or on the amount of development proposed there. The alternative route would be likely to cause less disruption to the servicing arrangements for the Talisman Business Park than Chiltern's route would.
- 6.52.7 Chiltern has considered this alternative route and says that it provides a workable alternative, but rejects the Alternative for three reasons:
- a) It falls outside the Order Scheme limits. But that is not a compelling reason to reject an objection. If such an approach was taken the process of hearing objections would be of limited value. At its highest the point is based on delay.
 - b) A mature tree would be removed. But that tree is likely to be affected by Chiltern's own proposals, it is of no amenity value and only potential ecological value, and its loss would not

outweigh the harm arising from interference with the London Road housing proposal.

- c) The Alternative encroaches on to a cycle track. But so would Chiltern's own proposal. And the cycle track leads nowhere (Obj 51&52/4) and is not in use. Temporary stopping up of the cycle track would have no adverse consequences of any substance.

- 6.52.8 There is no compelling case in the public interest to justify granting powers of compulsory acquisition of rights over Parcel 04037. An alternative route exists. The alternative route would have few adverse consequences and would not inhibit or delay the provision of much-needed housing. The fact that compensation would be payable to the objector is a factor to weigh in the balance, but the interference with the objector's property rights would be substantial and it would not be proportionate to hold that the public interest justifies interference with the objector's rights. Plot 04037 should be excluded from Schedule 11.

Langford Park Farm

- 6.52.9 The application for development of the London Road site is linked with a planning application (ref. 10/01316/F) for flood compensation works at Langford Park Farm. That Farm is served by an access road which would need to be lowered for flood management purposes associated with the London Road development. Acquisition by Chiltern of the access road (parcels 04a004, 04a003 and 05017) may affect the planning application or its implementation. There is no need for Chiltern to compulsorily acquire that land as Leda are prepared to enter an agreement with Chiltern whereby Chiltern may gain access for the purposes of the Order.
- 6.52.10 An Order made in the form of the draft submitted to the Secretary of State would give Chiltern the right to acquire Leda's land by compulsion. That right would interfere with Leda's ability to comply with any conditions that may be attached to any planning permission granted pursuant to application 10/01316/F, in particular, recommended condition 2 (CRCL/R/Obj51&52/4, page 43).
- 6.52.11 There is no compelling case in the public interest to justify authorising compulsory purchase of the land. Chiltern only require rights of access. There is no justification for acquiring the land. Leda is prepared to grant Chiltern a right of way over its land.
- 6.52.12 Plots 04a003, 04a004 and 05017 should be excluded from Schedule 2 of the draft Order; or, alternatively, the Secretary of State should indicate that he will not include those plots in the Order unless the promoter undertakes not to exercise powers to acquire the land but will only exercise the power to acquire rights under Article 25 of the draft Order.

6.53 **Mr Paul Withrington** (Obj 319)

- 6.53.1 Mr Withrington is the Director of Transport Watch, an independent association dedicated to making the best use of land already committed to transport.

Chiltern Generally

- 6.53.2 Since the start of its franchise in 1995, Chiltern has made a loss of £12.4

million annually, after stripping out its Network Rail grant. It has paid £21.5 million annually for track access, although the actual cost of maintenance and renewal is double the track access charge paid. And it has benefitted from £400 million capital expenditure on its route, on which the annual interest charge is £29 million. The loss to Chiltern is borne by taxpayers through Chiltern's parent Deutsche Bahn. In total Chiltern has imposed costs of circa £60 million per year on the taxpayer.

The Order Scheme

- 6.53.3 The Order Scheme, including Phase 2B, enables a passenger and freight flow that is, in highway terms, entirely trivial. There would be one 30-wagon freight train and eight passenger trains, each with two to three carriages, per hour. That is equivalent to about 50 vehicles, or 25 in each direction. The cost is an astonishing £185 million, excluding contingencies, a sum that is equivalent to £2,000 for every household in the affected area. Such expenditure is entirely profligate.
- 6.53.4 Chiltern seek to create (through Table 1 of CRCL/P/1/A, see 4.1.16 in this report) the illusion of a self-funding scheme, but nothing could be further from the truth:
 - a) The operating profit implied in Chiltern's business case is £1.1 million "cash flow" plus £116.5 million "facility charge": a total of some £117.6 million. This implies a profit of 74% on fares, which is an extraordinary figure, bearing in mind that the operation as a whole made a loss of £4.4 million in 2009-10. Chiltern has debts of £70 million, only £7 million in the bank, and makes a loss. It is entirely improbable that Chiltern could ever pay the facility charge or the Fixed Sum Payment of £30 million that would be owed to the DfT at the franchise end in 2021.
 - b) The incremental maintenance and renewals cost has been grossly underestimated at £26.3 million. Applying track access charges elsewhere, pro rata to fares, shows that that cost could be as high as £112 million.
 - c) Incremental train costs falling on Chiltern have also been grossly underestimated. An additional 10 carriages would be needed for the Oxford to Marylebone service, which would cost close to £70 million for the 9-year operating period, far above the £12.1 million that is the sum of the incremental train and station costs shown by Chiltern.
- 6.53.5 The idea that the Scheme is self-funding depends on assigning all the fares to the Scheme and most of the costs to the rest of Chiltern's loss-making operation. The UK national rail network is heavily subsidised, and the Scheme would add to that network and hence to the burden on the taxpayer. The real reason for this scheme may have nothing to do with passengers and everything to do with the greater freight interests, and those extract considerable subsidy from the taxpayer.
- 6.53.6 Chiltern's evidence is misleading in other respects:
 - a) The comparison of rail ridership between London and Oxford, Cambridge and Milton Keynes (4.2.10) does not include the

exceptional express coach services to Oxford. Taking those trips into account along with the other towns' coach services gives:

Comparative Ridership			
	Oxford	Cambridge	Milton Keynes
Trips per head to London, rail plus coach	34.3	38.6	17.2

- b) Chiltern claims a clear relationship between economic growth and rail traffic growth (4.2.14). While it is true that rail passenger traffic has grown from less than 40 billion to slightly more than 60 billion passenger-kilometres per year since 1995, Transport Statistics Great Britain (cited at Obj 319/3, 17) shows rail passenger traffic to have fluctuated between 30 billion and about 40 billion passenger-kilometres per year from 1952 to 1997. The time period chosen by Chiltern is "cherry-picked". In any event, most of the recent growth in rail use has happened at off-peak times, perhaps due to discount fares that have arisen since privatisation.
- c) Chiltern overstates the relative safety of rail against road (4.2.13). If trespassers but not suicides are included along with staff, rail kills more people per passenger-kilometre than does the motorway and trunk road system.
- d) Evidence brought by Chiltern (CRCL/P/2/B, appendix 3) shows that an express coach ("megabus") emits less carbon dioxide per passenger kilometre than the train, but Chiltern ignore that in their proofs of evidence (4.2.11). But the detail is spurious because the change upon transferring a few passengers from one mode to another is vanishingly small.
- e) Chiltern suggests there could be 48 freight trains per day (4.2.25). Table D5.3 in the Environmental Statement Volume 4 (CD/1.18) provides 25 per day. And they also suggest 10 per day (4.2.25). The probability is for substantial freight flows through the night making adjacent property well-nigh uninhabitable.
- f) Overcrowding (4.2.4) is not a significant issue at Oxford station.

Passenger Forecasts and Economic Analysis

- 6.53.7 Chiltern's analysis relies on "all-or-nothing" trip assignments, and is therefore extremely sensitive to changes of assumption. The forecasts take no account of the electrification of First Great Western lines, or of Crossrail, both of which will increase the relative attraction of Paddington. And Paddington, with its four tube lines, is better-connected to the Underground than is Marylebone, on only the Bakerloo.
- 6.53.8 68% of Chiltern's modelled Water Eaton passengers would come from the area to the west of the line between Oxford and Banbury within the

sector containing Witney. Nearly all of these are routed past Eynsham and through the Wolvercote roundabout. Most of them could be transferred to Oxford station if there were a relatively small change in the driving times from these points to the competing stations. Such a change might be in the phasing of the traffic signals, or if the route to the station were improved, or if the car park at Oxford station were double-decked to provide more capacity. Chiltern's claim that the all-or nothing assignments are robust and stable must be set aside.

- 6.53.9 Regarding generalised time, it is astonishing that the drive time from Witney is weighted by a factor of four. DfT guidance in Web TAG (Paragraph 1.2.19, Appendix A, Obj 319/3) is to weight walk and waiting time associated with commuting or leisure by a factor of 2.5. Chiltern claim that a journey from Witney to London Marylebone via Water Eaton offers a generalised time saving of 17 minutes, when compared with Witney to London Paddington via Oxford; but if the drive time weighting is removed and a spurious interchange penalty assumed by Chiltern at Paddington is also removed, the generalised time saving falls to 10.75 minutes. The generalised costs for these trips may very well be in favour of Paddington.
- 6.53.10 Chiltern's multiplier of four can only be generated by doubling the 20 or 25 minute driving time from (for example) Witney to the competing stations and multiplying the additional time by 2.5. But road congestion for 90% of the trips is not significant. For all those trips congestion delay and the time allowed for uncertainty, would be very much less than 20 minutes – and so a doubling of driving time is wrong. And the uncongested drive times from Witney to each of the two stations differ by only five minutes. It is likely that drivers would allow the same amount of time for congestion and uncertainty regardless of which station they choose.
- 6.53.11 Chiltern is correct in bundling operating costs and incremental fares with benefits in that DfT procedures have been followed correctly. But the DfT's underlying theory is unsound (Obj319/6, paragraphs 30 to 35; and Obj 319/14, 6 to 10).
- 6.53.12 The £222.3 million user benefits (4.4.15) will have a very large component dependent on multiplying a five-minute time difference by four. The non-use benefits of £116.3 million depend on removing a trivial number of vehicles from the road network. That approach is likely to produce a result that is far from the truth since most congestion occurs at road junctions, and may very well be relieved by relatively low-cost junction improvements. The economic analysis has to be set aside.

Another Option

- 6.53.13 It would be more cost-effective to close the railway to London, remove the track and pave the right of way and run express coaches on the route.
- 6.53.14 Mr Withrington says that Chiltern's proposals sit within National Rail and Government policy. His analysis of that policy is set out in paragraphs 83 to 90 of document Obj 319/1.

Closing Submission

- 6.53.15 Mr Withrington's closing submission (Obj 319/14) should be appended to the Inspector's report so as to not shield the Secretary of State.

6.54 **Mr Sean Feeney** (Obj 123)

The Need For The Scheme

- 6.54.1 Chiltern's statement of case (CD/1.27) cites Oxford City Council's emerging Core Strategy (CD/4.9) and says that it and the South East Plan Regional Spatial Strategy (CD/4.11) support growth in Oxford and therefore support infrastructure improvements, including the Scheme.
- 6.54.2 Before the Inquiry, the South East Plan was revoked by the Secretary of State. At the start of the Inquiry it was no longer Government policy and could not be used as policy support or evidence of a need for the Scheme.
- 6.54.3 The emerging Core Strategy was the subject of examination hearings in 2009 and on 14-17 September 2010. The Inspectors' report to Oxford City Council is dated 21 December 2010 (Obj 123/2). The Core Strategy remains to be adopted. And some residents and groups of residents have threatened to consider a judicial review.
- 6.54.4 Little weight can therefore be given to the Core Strategy or the South East Plan. Chiltern has failed to provide robust evidence of the need for the Scheme.

Water Eaton Station and the Green Belt

- 6.54.5 The proposed station would be in an unsustainable location and contrary to Planning Policy Statement 1 *Delivering Sustainable Development* and Planning Policy Guidance 13 *Transport*. The site is distant from houses in either north Oxford or Kidlington and therefore unsustainable in that it would increase car journeys. Furthermore, the new station should not be separate from the proposed Northern Gateway employment development site. (The location of the Northern Gateway site is shown on page 23 of Annex A1 of document Obj 123/2. It includes the Peartree park and ride site and land to its south and west.)
- 6.54.6 The applicant has failed to make out a case for exceptional circumstances for building in the Green Belt.

Danger of Death of Neighbouring Residents

- 6.54.7 Diesel is a carcinogen and is otherwise harmful to health. The Scheme would expose residents, particularly children, to a degree approaching occupational levels and poses a risk of ill-health and death.

Oxford Meadows Special Area of Conservation

- 6.54.8 An appropriate assessment has not properly been done of the effect of the Scheme on the Oxford Meadows Special Area of Conservation ("the SAC"). Chiltern's document CRCL/INQ/60 does not properly state the law or the tests to be applied. In accordance with the *Guidance Document On Article 6(4) Of The Habitats Directive 92/43/EEC* (Obj 123/8), the Secretary of State should have overwhelming regard for the integrity of the SAC. Chiltern seeks to mis-apply the precautionary principle, and if the matter is not put right the European Commission

might take infringement action.

- 6.54.9 Document Obj 123/2 reflects the failure of Oxford City Council to undertake an Appropriate Assessment for the emerging Core Strategy in that it requires an Appropriate Assessment (of the effect on the SAC) to be prepared so as to inform the development of a Masterplan for the Northern Gateway (page 66, IC10). The need for an Appropriate Assessment of that proposal is reiterated in paragraphs 4, 5 and 6 of document Obj123/3 (submitted to the Examination of the Core Strategy by Oxford Council, Natural England and the Berkshire, Buckinghamshire and Oxfordshire Wildlife Trust ("BBOWT")) and document Obj123/4 (also by BBOWT, to the same Examination). The effects that the Northern Gateway might have on the SAC arose from hydrology, air pollution and recreational pressure.
- 6.54.10 Document Obj123/5 is a Natura 2000 standard data form for the Oxford Meadows SAC. It should be updated in the light of the Core Strategy to provide a proper baseline for the Appropriate Assessment of the Scheme.
- 6.54.11 Although there is no evidence that some species present on the SAC had been missed in the preparation of the Environmental Statement, Mr Feeney was concerned that such an omission may have been made. Chiltern should show all field notes in evidence. The ES is not sufficient for an Appropriate Assessment, contrary to paragraph 2.53 of the *TWA Guide to Procedures* (document X3) .
- 6.54.12 There should be documentary evidence of a joint assessment of the Core Strategy/Northern Gateway and the Scheme. That had not been done.
- 6.54.13 It is irrational to contend there is no cumulative impact from plans and projects, including Chiltern's Scheme, on the Oxford Meadows Special Area of Conservation ("the SAC"). The precautionary principle enshrined in the Habitats and Species Directive requires that the Order be not made, because it would be impossible to compensate Natura 2000 for the loss of the (perhaps unique in the world) lowland hay meadows or to compensate for any loss of creeping marshwort.
- 6.54.14 Chiltern's traffic witness confirmed in examination that the only evidence of traffic flows at Water Eaton before the Inquiry refers to modelling of the a.m. and p.m. peak car flows. Thus there is no evidence of the off-peak flows, which the Scheme would undoubtedly increase.
- 6.54.15 Expert advice received by Chiltern from some of their advisors is not in evidence, but should be; it has not been tested by examination.
- 6.54.16 Chiltern's witnesses have confirmed that the evidence before the Inquiry does not include potential pollution impacts from the proposed Northern Gateway development, which is allocated by the proposed Oxford Core Strategy land use plan. The potential cumulative impacts have therefore not been assessed by evidence or tested under cross-examination, as is required under the Habitats Directive's precautionary principle.
- 6.54.17 Chiltern's evidence is that prevailing winds near the SAC are from the south-west. Such winds would blow pollution from the Scheme away from the SAC and are therefore not part of a "worst case". The precautionary principle requires that a prevailing strong wind from the

east should be assumed, in conjunction with one or more trains on the line.

- 6.54.18 Document CRCL/INQ/74 includes a map showing the locations of parts of the SAC designated for the lowland hay meadows. This map was produced very late in the Inquiry and has not been tested by cross-examination as is required under the Habitats Directive.
- 6.54.19 Chiltern has provided no evidence on the potential impacts from vibration on the priority habitat and species for which the Meadow is designated. The potential impacts of vibration on the SAC therefore cannot currently be assessed.
- 6.54.20 The Inquiry has therefore failed to properly inquire into Matter 8. Mr Feeney intended to raise this matter with the European Commission.
- 6.54.21 The Order application should therefore be refused.

6.55 **Additional Matters Raised In Objections Made By Written Representations**

- 6.55.1 **Merton College** (Obj 15) has an interest in land on each side of the railway in the vicinity of the North Oxford Golf Course, and has a right of way across Nesbitt's Crossing (parcel 24019). Whilst this crossing has not been used for many years, it exists and is marked for potential use in the future. The Scheme would close the crossing, but it should be retained.
- 6.55.2 The Book of Reference shows Merton College and Exeter College to both own parcel number 24008. Merton College does not share ownership with Exeter College. This error should be rectified, something with which Merton College and Exeter College are willing to assist.
- 6.55.3 **Exeter College** (Obj 16) owns land to the east of the railway in the vicinity of the North Oxford Golf Course. Its objection relates to parcel number 24008 and is in similar terms to that of Merton College (6.55.2).
- 6.55.4 **Mr Robert Barbour** (Obj 17) objects to the closure of Oddington Foot crossing, which he uses to access some 46 acres of his land on the south-eastern side of the railway (plan attached to letter Obj/17 dated 4 February 2010). The majority of his land is on the other side of the railway and relies for its drainage on the drainage system on the 46-acre site. Access is necessary to maintain the drains.
- 6.55.5 **Scottish and Southern Energy plc** (Obj 19) objects to the Scheme by letter dated 3 February 2010 on the grounds that details of the proposals have been neither provided nor agreed, and that compensation has not been agreed.
- 6.55.6 **Freightliner Group Limited** (Obj 21) and **Freightliner Limited** (Obj 22) object to the Scheme in their letters dated 5 February 2010 on the grounds that arrangements for track possession have not been made. The Freightliner Group includes Freightliner Heavy Haul Limited, identified in the Book of Reference as a freight beneficiary; they operate rail freight services on the line, carrying waste to Calvert waste terminal. At the time of its objection (dated 5 February 2010), Freightliner was in ongoing discussion with Chiltern.

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- 6.55.7 **Southern Gas Networks plc** (Obj 24) objects to the Scheme by letter dated 3 February 2010 on the grounds that details of the proposals have been neither provided nor agreed, and that compensation has not been agreed.
- 6.55.8 **Ms B Forrow** (Obj 26) lives at Whimbrel Close, Bicester and her property is about 15 metres from the railway. Ms Forrow is concerned about noise and vibration associated with the Scheme and seeks assurance that noise barriers would be put up near her house at the outset, and that her house should be free of vibration caused by the Scheme even if Chiltern consider impracticable the mitigation measure they suggested in a letter to her.
- 6.55.9 **The Fitness Company** (Obj 27) has premises at Unit 7, McKay Trading Estate, Bicester. In their letter of objection dated 30 January 2010 the company contends that the Scheme would remove all vehicular and pedestrian access to their site, and would remove all the parking that the company currently enjoys. This would cause the business to fail.
- 6.55.10 **Mr G Hill, Mr M Hill and Mrs A Hill** (Obj 29) have an interest in land at Langford Lane on the west side of the level crossing. Their letter dated 10 February 2010 refers to the Scheme having a detrimental effect on their land (by virtue of noise, visual intrusion, and pollution by dust and fumes), to their concern that the residual length of Langford Lane west of the railway would be subject to fly tipping or the parking of caravans, and to their belief that the Scheme would cause flooding on their land.
- 6.55.11 **Gosford and Water Eaton Parish Council** (Obj 33) raised the following additional points in their objection:
- The aggregates depot at the proposed station site operates without planning permission. It should not be relocated in the Green Belt.
 - The Parish Council is not satisfied by the Flood Assessment prepared for the Scheme, with particular regard to the effect the scheme would have on surface flows in the flood plain, flood level verification and flood storage requirements.
 - There should be an on-street parking management plan to protect the Parish from commuters parking all day in the streets.
- 6.55.12 Without prejudice to its objections, the Parish Council submitted two suggested **planning conditions**. These raised one new matter: the routeing of lorries to and from the aggregates depot. The Parish Council draws attention to conditions recommended in an approved officer report to the County Council's relevant Committee in 1999 about an application by Tarmac for an aggregates depot at the Water Eaton sidings. Lorries were required to use a route that avoided Oxford and Kidlington.
- 6.55.13 **Dr Ian East** (Obj 34) writes on behalf of the Oxford-Bicester Rail Action Group to object to the proposed reduction in train services calling at Islip from 11 trains per weekday, to 8. The reduction would fail to make the best use of the existing resource that is Islip station, and would be likely to reduce passenger numbers there.
- 6.55.14 Dr East also submitted a petition signed by 156 people: "We the undersigned of Islip demand a footbridge in Mill Lane over the railway, following any closure of the level crossing, the cost of which is to fall on
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parties incurring closure and not upon village residents."

- 6.55.15 **Birch Sites Limited** (Obj 53) ("Birch") owns parcel 03011 and adjacent land between the Scheme and Launton Road, Bicester. Chiltern seek temporary access over parcel 03011. Birch proposes an alternative access across its land, shown on Appendix 1 of document Obj53/2W. Discussions took place with Chiltern but there was not complete agreement. Birch considers that the draft Order proposal would:
- Interfere with the only vehicular access to Birch's land;
 - Cause an unacceptable risk to Birch by giving the public access to Birch's land;
 - Delay development on the Birch site; and
 - Unnecessarily sterilise the rights land, and the land and buildings on either side of it.
- 6.55.16 **Thames Water Utilities Limited** (Obj 60) seeks various modifications to the Order, set out with its letter dated 12 February 2010, for the protection of its apparatus and operations.
- 6.55.17 **Dr R.B. Parekh** (Obj 67) of Alchester House, Langford Lane objects to the Scheme by letter dated 11 February 2010 on various grounds including the effect on his property by virtue of noise, visual intrusion, and pollution by dust and fumes; increased travel distance following the closure of the level crossing next to his home; and retention of Dr Parekh's access rights over the Taylor No. 1 level crossing.
- 6.55.18 **Ms D.M. North** (Obj 68) by letter dated 12 February 2010 objects that the proposed replacement of the Oddington level crossing by Work No. 14 would greatly increase travel distances, and the gradients would make the route more susceptible to weather conditions.
- 6.55.19 **Professor John Howson** (Obj 72) draws attention to the proximity of the Scheme to the Swing Bridge at Castle Mill Stream, and the need for the Scheme to have regard to the setting of that scheduled monument.
- 6.55.20 **Mr J M Henman and WR Henman and Sons Limited** (Obj 73) object in their letter dated 12 February 2010 to the proposed closure of Brookfurlong level crossing, which would cause severance of their land. Most of their land is to the north west of the railway, but some 20 acres lie to the south east.
- 6.55.21 **Mr P.M. Napier** (Obj 88) is a resident of Quadrangle House (see also section 6.11 of this report). He points out that there are first and second floor flats there, above the ground-floor parking. He considers that necessary noise and vibration mitigation should be secured, by planning condition, so that the applicant is required to carry them out. To reduce disturbance at Quadrangle House and other residential properties, the points proposed to be located some 150 metres to the north of Quadrangle House should be placed nearer to Oxford North junction by St Edwards School playing fields.
- 6.55.22 **Mr D.R. Davies** (Obj 100) objects to the Work No. 16 bridge for reasons given by others and because it would overlook houses in Mill Street (most notably The Grange and Prospect House).

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- 6.55.23 **Hanson Quarry Products Europe Limited** (Obj 101) ("Hanson") occupies part of the site of the proposed Water Eaton station and operates a rail freight depot there where up to 100,000 tonnes of limestone are imported by rail each year. The imported stone is then distributed by lorry throughout Oxfordshire. It is an important component in higher strength concrete production and could not be replaced in that use by local gravel. Crushed limestone is also needed by permeable paving systems (local gravels or traditional "Type 1" sub base material are not suitable), and is also widely used as general sub base material and for general concrete production.
- 6.55.24 Closure of the rail depot at Water Eaton would seriously reduce Hanson's ability to meet demand for these products and harm profitability, even if some business was transferred to Hanson's railhead at Appleford. Reduced consumption of rail-imported limestone in Oxfordshire would also harm the source of this material at Hanson's Whatley Quarry, which is geared to high output via rail distribution. Locally, Hanson's business would suffer through its inability to supply nearby fixed concrete plants at Horspath (8 miles) and Bicester (9 miles), in which Hanson has interests. Closure of the depot would therefore affect the aggregate business and the local ready-mixed concrete business.
- 6.55.25 There is no surplus land in the usable depot site that could be vacated for the station development. Nor could the current type of depot operation co-exist successfully with a passenger station and, if that were attempted, various costly amendments would be needed to the depot.
- 6.55.26 Removal of the aggregates depot without replacing it would conflict with Government policy relating to rail transport. Minerals Policy Statement 1 *Planning and Minerals* ("MPS1") says that the promotion of sustainable transport for minerals by rail is one of the national objectives for minerals (MPS1 paragraph 9). Safeguarding existing storage, handling and processing facilities for the bulk transport of minerals by rail is one of the Government's key national policies (MPS1 paragraph 13).
- 6.55.27 Saved Policy SD7 of the Oxfordshire Minerals and Waste Local Plan (adopted in July 1996) confirms that "subject to the requirements of Policy SD8, rail head development for the import of aggregates will be encouraged at ... Kidlington – Inset Map 8." Policy SD8 is not saved. Inset Map 8 shows the rail depot at Water Eaton, marked "Rail depot to be safeguarded in accordance with Policy SD7." Saved Policy SD9 says "no development will be permitted which prejudices the establishment and full use of rail depots identified under Policy SD7 ... where development is proposed near to a proposed or approved rail depot, uses or buildings sensitive to disturbance from activities at the rail depot will not be permitted."
- 6.55.28 Gosford and Water Eaton Parish Council are wrong to assert that the current use of the site is unlawful. A facility for transferring goods and minerals from rail to road has existed at Banbury Road, Water Eaton since the 19th century. The present operation is an established use for which a specific planning permission is not required.
- 6.55.29 Hanson is aware of Chiltern's proposal to relocate the depot. Subject to agreeing design details and being satisfied that its future activities would
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not be materially compromised, Hanson may then be in a position to withdraw its objection to the Order. Until then, the objection remains. It is made on the following grounds:

- Severe and lasting effect on Hanson's business; and
- Conflict with Government policy relating to rail transport in MPS1.

6.55.30 Hanson submitted document Obj/101/5 to the Inquiry in which are comments on conditions proposed by Chiltern for the replacement aggregates depot.

6.55.31 **Mark Richardson and David Richardson** (Obj 107) own parcel 04007, part of the premises of their company, Bicester Bodyshop. They take issue with the design of the proposed junction between London Road and Station Road, and wish to argue that the land to the north of the proposed junction (the land which houses an electricity sub station) could be used for the junction alteration, thereby avoiding or reducing the need for their land to be compulsorily acquired for the Scheme.

6.55.32 **Oxford City Council** (Obj 109) objects to the Scheme insofar as it would affect land in which the City Council has an interest and gave the following additional evidence:

- a) The Trap Grounds Allotments site is fully let, with a waiting list for plots. Document Obj/109/2W includes at Appendix 2 a plan of the Allotments and photographs.
- b) Parcels 29003 and 29004 are currently part of the access into the Allotments that also crosses the level crossing. The proposed alternative route is longer, via the bridleway, and often impassable during wet weather due to flooding on Port Meadow. Part of these parcels has been earmarked for an extension to the site of SS Philip and James School, and discussions have taken place with the County Council to transfer some of the land and to retain part of the site for parking by allotment holders.
- c) Parcels 29010, 29011 and 30009 would be used by the published scheme for vehicular access across Port Meadow to the allotments. The Council has hitherto imposed tight controls over the use of this track. The track is unfenced (photograph 4 in Appendix 3 of Obj/109/2W) and the surface of the Meadow could be damaged by vehicles driving or parking on it. The City Council would not be able to supervise the use of this track by vehicles. The City Council is strongly opposed to the granting of vehicular rights over the unfenced track across Port Meadow from Walton Well Road, as these could be open to misuse.
- d) Parcels 29015 and 29016 were included in the published scheme for the construction of a ramped access from the bridleway into the Allotments. This could interfere with grazing patterns, thereby altering the character of the land in this corner. Heavy construction plant, if used to build this ramp, could disturb the Port Meadow SSSI. The erection of a ramp in the Allotments could cause considerable disruption there. The

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- alternative proposal, to raise the level of the path at the western end of the bridge ramp, has not so far been shown to be feasible.
- e) Parcels 30003 and 30004 form part of a site owned by the City Council and used for residential moorings. The acquisition of this land, or rights over it, may prejudice this use of the land. As these parcels are not identified in either Schedule 2 or Schedule 11 of the Order, the proposal is not clear. All steps must be taken to minimise disruption of the residential use.
- 6.55.33 In the circumstances, the foot crossing of the railway to the Allotments should be retained. In the event that the Secretary of State agrees, the City Council would consider favourably any alternative proposals (such as those suggested by Mr Salisbury (6.4.21)) that grant an alternative right of access to the Allotment Association, so far as this is consistent with the aim of extending the School. Full details of such a scheme would need to be agreed and legal documentation drawn up and executed.
- 6.55.34 Document Obj109/3W includes at Annex A the City Council's recommendations in respect of **planning conditions**.
- 6.55.35 **Mrs E Henebery** (Obj 125) explains in her letter dated 12 February 2010 that she lives in the former crossing keeper's cottage in Mill Lane, Islip, which she bought in 1969. The "Work No. 16" bridge would be unsightly and intrude on her privacy. With its approach ramp it would virtually surround Mrs Henebery's house. It would be impossible to enjoy the garden due to the noise of passing trains.
- 6.55.36 **Plumbase Limited** (Obj 130) occupies Unit 8 of the McKay Trading Estate at Station Approach, Bicester. The proposed compulsory acquisition of that property is not justified, as there are better alternative sites available for the proposed car parking which would only require the acquisition of older obsolete buildings. The Scheme had not been revealed by Cherwell District Council when a Local Search was made in September 2007. Compulsory purchase of Unit 8 would result in the permanent loss of four jobs there. The draft Order has blighted the property and it is extremely difficult to determine whether the relocation of the business will be required.
- 6.55.37 **Oxfordshire County Council** (Obj 131) identifies in its statement of case the following objections:
- a) The Scheme would be inappropriate development in the Green Belt for which very special circumstances have not been demonstrated.
- b) The Scheme proposal for Work No. 11 would impact on nationally important remains of Alchester Roman Town and the former enclosure to the south east of the town which has been shown by field evaluation to be a Roman military parade ground (which Work No. 11 would separate from the Town).
- c) The proposed station car park at Bicester would be too big and would encourage car trips, rather than trips by more sustainable modes, to the new station.
- d) The designs of the proposed station access road junctions at
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- Water Eaton and Bicester had not been validated.
- e) The car park charging regimes at Bicester Town and Water Eaton are not stated and may be such as would have an overall adverse impact on modal choice and journey length for access to the railway station.
 - f) The Water Eaton park and ride site operated by the County Council is an important part of the travel management of Oxford which has been successful in reducing traffic demands in the City. The draft Order would allow the compulsory purchase of the whole site. It is essential that all the current car parking spaces, bus terminal area and facilities remain for use by people planning to continue their journey by bus to Oxford. Chiltern or their successors should be bound to manage rail user demand so that the capacity of the bus users' car park is not prejudiced. There should be a joint management strategy (including charging and other matters) for the two car parks which ensures that the County Council retains full management and control of parking at the park and ride site, throughout its planned life (to at least 2045), and the combined site should be designed to operate effectively for all users.
- 6.55.38 Document Obj131/4 (12 January 2011) explains that through negotiation with Chiltern those objections had largely been overcome, with three exceptions. The position then was:
- a) Green Belt: no objection, subject to the imposition of conditions shown at Annex 5 of document Obj 131/7. Those relate to the proposed aggregates depot.
 - b) Water Eaton car park: no objection, subject to the imposition of a condition in the form now agreed with Chiltern.
 - c) Archaeology: no objection, subject to the imposition of a condition in the form now agreed with Chiltern.
- 6.55.39 The County Council did not appear at the Inquiry but was represented at the conditions session on 26 January 2011 and raised no objection to the conditions proposed by Chiltern in respect of the aggregates depot, Water Eaton car park, or archaeology. In response to my question at that session the County Council confirmed that it had no evidence that road conveyance of aggregate to or from the proposed depot would harm the amenity of the area or the integrity of the highway network.
- 6.55.40 Document Obj131/5 is a letter from Oxfordshire County Council, dated 11 January 2010 but addressed to me by name which, since my appointment had not been confirmed in January 2010, indicates the given date to be wrong. The County Council supports the Scheme. The Scheme would deliver a step change in accessibility that would support planned growth. It would greatly assist in reducing the impact of that growth on an already congested road network. The County Council particularly supports the much-improved service between Bicester and Oxford, the improved access to rail services from north Oxford and Kidlington, and the congruence between the Scheme proposals and those
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for the broader East West Rail project. The County Council identifies East West Rail as a key priority for realising the ambition of the Oxfordshire City Region Enterprise Partnership, of which the County Council is a member.

- 6.55.41 SS Philip and James School has a shortfall in playing field space. Although the County Council does not support the extension or retention of the level crossing near Aristotle Lane, the County Council would (if the Secretary of State were to decide that the crossing should not be closed) allow its land (if it is found to be in the County Council's ownership) to be used as part of the car parking layout proposed by the Trap Ground Allotments Association (6.4.21). The use of this vacant land for parking would benefit the school. The County Council would not wish the Secretary of State to attribute any weight to that benefit in considering objections to the Scheme proposal regarding the level crossing.
- 6.55.42 **Dr Rob Hope** (Obj 179) is an economist with expertise in the use of economic methods to examine behavioural responses to and demand for competing policy alternatives. Chiltern's demand forecasts are driven by past sales of rail tickets and Passenger Demand Forecasting Handbook data (not publicly available) to estimate geographic clusters (hexcells) of the propensity to use rail (CRCL/P/5/B appendix 2). No data had been generated of other competing transport modes to London (coach/bus, or car) from the Oxford area. It should be a matter for concern that no primary data have been collected to model transport choices given competing alternatives of transport mode, of journey time, of journey cost or of service convenience (i.e. regularity or convenience of service). Such analysis is standard in transport economics internationally. In the case of the Scheme, one might consider as a minimum comparing (a) the two Oxford services to London by time, cost, convenience and reliability; and (b) modal shifts to/from car or coach to train.
- 6.55.43 Given the limited scope, uncertain accuracy and ambiguous rigour of the demand forecasts, consideration of a more thorough and low-cost assessment would seem in the public interest.
- 6.55.44 **Mr and Mrs Honour** (Obj 185) live at Holts Farm. There is no compelling case for the acquisition of rights or property from them. Only scant details are provided of how their land would be used. Nor is there much evidence to justify interfering with their human rights by way of property ownership.
- 6.55.45 Work No. 13 would provide a new route on Mr and Mrs Honour's land available for use at will by third parties and the public. It would harm the visual amenity of Holts Farmhouse. It would take land and sever other land, adversely affecting the profitability of the farming system.
- 6.55.46 Mr and Mrs Honour consider that the Scheme should be modified to have as little impact as possible on Mr Mark Howard's land (Obj 184, withdrawn), and to protect the Mansmoor Closes SSSI. They favour the scheme shown on the final page of document Obj185/3, which would reposition the bridge (proposed as part of Work No. 13) some 1350 metres further north, on Mr Mark Howard's land. It would provide a vehicular access from the public highway to the south-east over a new track on Mr Tim Howard's land, and then via the existing M40 railway

underbridge. Nearby access changes associated with the Scheme could be achieved by this means so as to meet the objections of the Berkshire, Buckinghamshire and Oxfordshire Wildlife Trust (6.51) and Mr Miller (Obj 241, 6.55.58). This approach is supported by:

- a) Natural England (Obj 246/5, paragraph 3.3) (6.55.70g);
- b) Mr Mark Howard (Obj 184/7, reproduced as appendix 4 to Obj 185/4); and,
- c) The Calcutt Trustees (Obj 185/4, appendix 5).

6.55.47 The Highways Agency, by letter dated 2 December 2010 (Obj 185/4 Appendix 6), consents to the use of the M40 underbridge for third-party vehicular use and the creation of a public footpath there. Network Rail, by letter dated 9 December 2010, confirmed that it has no objection in principle to the grant of rights of access under the M40.

6.55.48 Mr and Mrs Honour also raised the following objections not raised elsewhere:

- a) The lack of any long-term proposals for the maintenance of Mansmoor Lane or Work No. 13, should the Scheme proposal go ahead and the traffic on Mansmoor Lane consequently increase;
- b) The harmful effect the Scheme would have on their property by virtue of noise, vibration, dust and dirt.

6.55.49 Without prejudice to their objection, document Obj/185/5 sets out conditions to which Mr and Mrs Honour consider the Scheme proposals should be subject.

6.55.50 **Mr and Mrs E Williams** (Obj 208) object to the Scheme on the grounds of the effect it would have on their property at 398B Woodstock Road by virtue of noise and vibration. They also draw attention to the public health implications of increased effluent discharge from passing trains. There are already rats in and near to Wolvercot Tunnel.

6.55.51 **British Waterways Board** (Obj 214) ("BWB") owns and operates the Oxford Canal, a highly popular cruising waterway, and is the riparian owner of part of Castle Mill Stream. BWB has a statutory obligation, under the Transport Act 1968, to maintain the Oxford Canal for continuous navigation. The draft Order would authorise Chiltern compulsorily to acquire land or interests in land from BWB. BWB is prepared to reach agreement over the limited transfer of land or the grant of rights over its land and airspace which are essential for the proposed works and which do not directly interfere with the navigable channel of the Canal.

6.55.52 In the absence of such agreement, BWB's objections are summarised as follows:

- a) **Disruption** – The Scheme would dual the railway track at Bridge 236A (shown as OXD50 on sheet 27 of the Deposited Plans), which may necessitate widening or strengthening of the bridge. That could potentially cause severe disruption to the operation of the canal while work is carried out. Several residential moorings and a hire boat and boat maintenance

business could be isolated during the works and the towpath, which is well-used by pedestrians, severed. Although Chiltern has provided very little information about its intentions concerning closing or blocking the canal or the towpath, BWB considers reasonably practical the option of Chiltern undertaking all necessary works from the land and from the bridge itself.

- b) **Visual Amenity** - Bridge 236A is visually appealing (Obj 214/4 appendix 2) and would be likely to be severely affected if engineering works were carried out to it.
 - c) **Customers' Interests** – Neither Castle Mill Stream nor Rewley Abbey Stream is controlled by BWB but BWB's customers use them to pass between the Oxford Canal and the Thames. If those streams were stopped up or dewatered for the Scheme, BWB's customers would be obliged to follow a diversion 5 kilometres longer than the usual route.
 - d) **Drainage** – The water level of the Oxford Canal is above that of Castle Mill Stream. Two weirs regulate flow from the Canal to the Stream. Chiltern have not ruled out dewatering Castle Mill Stream but if dewatering took place then water could not leave the Canal and, as more water was admitted from locks upstream, the Canal would either overflow (perhaps causing flooding) or water would have to be pumped past the dewatered section.
 - e) **General** – Chiltern has provided no information about how the navigation would be affected by the exercise of the Order powers, and BWB does not agree with Chiltern that the effects would be minimal. BWB requires every third party seeking access to BWB land for works to sign up to *The Code Of Practice For Works Affecting British Waterways* (Obj 214/4, appendix 4) but Chiltern has not done so. The draft Order provides no obligation for Chiltern to give timely notice of works authorised by the Order, but such notice is needed. The draft Order would not protect BWB from detriment arising from the Scheme or its construction. Nor would it protect against possible damage to BWB property caused by vibration. The draft Order should give BWB a right to consider and approve plans and designs for the Scheme where such approval is needed to protect the Canal.
- 6.55.53 At the time of submitting its proof of evidence, BWB had sought but not secured an agreement with Chiltern to address these concerns. BWB therefore identified some 14 matters in respect of which BWB seeks the agreement of Chiltern (Obj 214/2, 9.2).
- 6.55.54 BWB's submission pursuant to section 17 of the Acquisition of Land Act 1981 is the subject of consideration elsewhere in this report (3.5).
- 6.55.55 **Mr and Mrs Unwin** (Obj 222) live at Brookfurlong Farmhouse, several hundred metres north of Islip. The draft Order would extinguish the only vehicular access to their home, being the Brookfurlong accommodation crossing (on a route which pre-dates the railway), and makes no

provision for an alternative new accommodation crossing. Nor are the materials described which would be used in building an alternative access route to Brookfurlong Farmhouse. The proposed closure of the Islip Foot Crossing and Islip No. 4 Crossing would reduce the number of recreational walks available from Brookfurlong Farmhouse and inconveniently increase the walking distance to Islip.

6.55.56 Chiltern has proposed an alternative access route to Brookfurlong Farm (appendix B of Obj 222/2). Mr and Mrs Unwin do not accept that proposal because:

- The proposal does not recognise that Brookfurlong's existing access is shared with only one other party (W.R. Henman & Sons) who makes about 10% of the total trips on the access;
- The proposal does not recognise that most of the new access route would be used by 5 parties;
- Chiltern refuse to bring the new route to a standard commensurate with the higher use to which it would be subject, or one which would minimise future maintenance costs. It is currently in poor condition and, in part, subject to flooding. Concrete surfacing throughout the new route would be suitable.

6.55.57 **Mr B Henman**, J E Henman and Son (Obj 226) objects to the proposed closure of Islip level crossing and Mill Farm Crossing. He uses both crossings with agricultural machinery to access the land he farms, and has done so since 1962 without incident. In each case, an alternative vehicular access should be provided for farm traffic. The average weekly usage of Islip crossing is not adequately reflected in Chiltern's survey, which was taken on a single Sunday. Mr Henman suggests that either a level crossing with barriers should be provided, similar to that at Yarnton Lane between Kidlington and Yarnton which crosses a high speed railway; or, alternatively, the proposed bridge to accommodate pedestrians, bicycles and horses at Islip Crossing should be upgraded to accommodate vehicular farm traffic, and to restrict access to users. There is an active badger sett at the site of the proposed Islip Crossing bridge.

6.55.58 **Mr Paul Miller** (Obj 241) owns two farms affected by the proposals: Wendlebury Meads, which includes Home Farm crossing and which is a SSSI; and Alchester, the Roman town site. These two holdings are farmed by Mr Miller as a single unit. He objects to the Scheme because:

- a) Closure of Home Farm crossing would be harmful to his business, by virtue of the length of the alternative routes. A bridge should be provided over the railway.
- b) Mr Miller's current access to Wendlebury Meads is via a well maintained concrete road shared only with his neighbour Mr Mark Howard. The proposed access would require Mr Miller to use Mansmoor Road, a stoned track with limited passing places that is used by many different landowners. Mr Miller has no rights over Mansmoor Road and the Order does not show how he would gain such rights.
- c) From the northern end of Mansmoor Road, the Order supposes

that Mr Miller would access his severed land and buildings to the south-east of the railway via land parcels 12003, 11008 and 11005. Mr Mark Howard would be obliged to use the same route to access his land severed by the closure of Manor Farm crossing. These are all unmade grassed routes and, if used by heavy agricultural machinery throughout the year, would become deeply rutted and impassable. Any new track should be made up with a 3.3-metre wide reinforced concrete access road. There would be no impediment to this in parcels 12003 and 11008, but 11005 is currently part of a grass field forming part of the Wendlebury Meads SSSI. Natural England opposes the laying of concrete tracks, or even stone tracks, in the SSSI. This is one of the wettest parts of the SSSI and it would quickly become damaged, in contravention of Mr Miller's Management Agreement with Natural England (document Obj241/5 appendix 2).

6.55.59 In May 2010 Chiltern produced a *Level Crossing Replacement Options Report – Manor Farm, Home Farm, BEEBONT, Holts Farm* (CD/2.16), which details seven possible options for access changes in the area. None is appropriate. Four further options have since been generated and of those Option 13, first proposed by Chiltern's agent on 12 October 2010, is supported by Mr Miller and by Chiltern. Option 13 has these characteristics:

- a) A new concrete track would be built to give access for Network Rail and Mr T Howard to the north east of the M40 motorway as shown red on the plan that forms Appendix 9 of Obj 241/5, and Mr Miller would be given full legal rights for all purposes and at all times to make use of that track.
- b) The access described in 6.55.59 a) would make use of the M40 underbridge, which would accommodate the new railway, the realigned public footpath and agricultural vehicles and trailers.
- c) Mr M Howard owns some 32 acres of land to the south west of the M40 motorway, shown edged purple on the Appendix 9 plan. This land would be acquired by Chiltern and the title immediately transferred to Mr Miller.
- d) A building and facilities on Mr Miller's land on the north west of the railway (edged red on the plan) would be replicated on the land being acquired from Mr M Howard, and served by a concrete access track from the M40 underbridge.
- e) The new building would need a new access (a concrete track) to Mr Miller's existing building on the south east side of the railway and, if Natural England maintain their objection to paving part of the SSSI, Chiltern would need to provide a second replacement building on land acquired from Mr M Howard.
- f) Mr Miller would transfer to Chiltern title to his 8 acres of land and agricultural building shown edged red and blue on the plan, but would retain rights of access along the existing concrete road.

- g) This is a viable solution and can, in the view of Mr Miller's agent, be recommended to Mr Miller.
- 6.55.60 Alternatively, Mr Miller proposes options 10, 11 and 12 (Obj 241/2, Appendix 4) :
- Option 10: Work No. 13 would not be implemented. Instead, a new concrete road would extend from the Merton to Charlton-on-Otmoor road to the railway near the M40, cross the railway on a new bridge and continue to Holts Farm. This would give access to land owned individually by Mr P Miller, Mr M Howard and Mr G Honour. Among its other characteristics, Option 10 would take some 30 square metres from the Wendlebury Meads SSSI.
- Option 11: Work No. 13 would be implemented in part, to provide access to Holts Farm only via the new bridges and road from Mansmoor Road. A second bridge would also be built over the railway, near the M40, to connect the existing access road from the north west to the land on the other side of the railway owned by Mr P Miller and Mr M Howard (land which would otherwise be severed with the closure of Home Farm crossing and Manor Farm crossing). Among its other characteristics, Option 11 would take no land from the Wendlebury Meads SSSI.
- Option 12: This is the Scheme proposal with the addition of a concrete access track across the Wendlebury Meads SSSI (parcel 11005) and through parcels 11008, 12003 and 12004 to enable a viable access to be maintained for Messrs Miller and Howard. A new concrete access track would also be built to the north and west of Holt's Farm, to connect onto the north western ramp of Work No. 13. This option has less general support among the landowners than do options 10, 11 or 13.
- 6.55.61 **Mr T Howard** (Obj 242) farms College Farm, Wendlebury. The farm straddles the railway. It extends to some 244 acres, with some 102 acres and the main farmstead to the north-west of the line, and the remaining 142 acres on the other side. Currently the two bodies of land are connected by three level crossings (College Farm No. 2 Crossing, Farm Crossing, and Bonners Crossing). The Scheme would close these crossings. Chiltern has withdrawn the original proposal (Obj242/2B, Appendix 1, 7 April 2009) to put a bridge over the line to give access to the 142 acres of severed land.
- 6.55.62 On 27 May 2009, Mr Howard's agent wrote to Chiltern to invite interest in the purchase by Chiltern of Mr Howard's land to the east of the railway. The farm was on the market then, perhaps to be sold in lots due to the uncertainty caused by the Scheme. When the farm was offered as two lots, the particulars were clear that the land to the southeast of the railway would be accessed through the land to the northwest, using the promised overbridge. On 20 June 2009 the farm was withdrawn from the market. On 26 June 2009 Mr Howard received a letter from Chiltern to say that there would be no bridge.
- 6.55.63 The proposed access arrangements that the Scheme would introduce

would give access to the severed land via a new access road from the village of Merton over third-party land on the north-eastern side of the M40 motorway. This would result in a round trip of at least 16 miles (via Bicester) or some 20 miles (via Islip) for Mr Howard. Each round trip would take a minimum of 30 minutes and much longer if driving a tractor or heavy agricultural machinery. The Scheme proposal would fail to adequately link the two parts of College Farm and are impractical. A bridge would provide an adequate link.

- 6.55.64 Mr Howard now intends to develop the farming business at College Farm by reintroducing a beef suckler herd on the 142 acres to the south-east of the railway. In the absence of a connection across the railway, this would necessitate the provision by Chiltern of new buildings on the 142-acre site, since that would need to operate as a separate unit. There are currently no buildings there.
- 6.55.65 The sounding of horns by passing trains frightens Mr Howard's 5000 free-range chickens. If the sounding of horns become more regular or frequent, chickens could be trampled by others in the flock and egg production reduced. Mr Howard's plans to expand the free-range chicken enterprise have been put on hold until this effect can be quantified and assessed.
- 6.55.66 College Farm has an established and profitable 24-horse equestrian livery yard, with horse owners allowed to hack around the farm on both sides of the railway. The increased speed and frequency of the trains would make the safe hacking area much more restricted and, even if a bridge was provided, it would be impassable for all but the most determined rider. College Farm has liveries of mixed abilities, ages and confidence. If the hacking facility was taken away, a significant proportion of those liveries may leave with potentially catastrophic consequences for the business.
- 6.55.67 The railway track is generally hidden by trees (largely willow) at present, which would be lost to the Scheme and not replaced. This would harm the appearance of the area.
- 6.55.68 Mr Howard was in negotiation with Chiltern at the time of the Inquiry but agreement had not been reached and his objection remains.
- 6.55.69 **Natural England** (Obj 246) objects to the Scheme by virtue of the interaction of the Scheme with various designated sites, and on certain protected species.
- 6.55.70 As to designated sites:
- a) Part of the Oxford Meadows SAC is designated for supporting lowland hay meadow (the part of the SAC that is also covered by the Pixey and Yarnton Meads SSSI, Wolvercote Meadows SSSI and Cassington Meadows SSSI). The rest of the SAC is designated for supporting creeping marshwort (the part of the SAC that is also covered by Port Meadows with Wolvercote Common and Green SSSI).
 - b) Because the increase in air pollution associated with the Scheme is unlikely to have a significant effect on creeping marshwort, Natural England has no objection in relation to air

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- pollution at the SAC.
- c) Direct disturbance of the SAC could arise from increased vehicular use of the track across Port Meadow, or from parking on the SAC. Details of any proposed arrangement for either of those changes would be needed in order to properly conduct an assessment under the Habitats Regulations.
 - d) Direct disturbance of the SAC might also arise from construction works in the SAC, such as are proposed. It would be satisfactory for a detailed method statement to be required by condition, but the draft methodology for any works affecting the SAC should be available to the Competent Authority to give certainty that the works can be undertaken without harm to the site, and therefore inform any assessment under the Habitats Regulations.
 - e) The Scheme would result in increased nitrogen deposition on the Port Meadow and Wolvercote Common and Green SSSI. The increases are not certain to harm the designated site, but the Conservation of Habitats and Species Regulations 2010 (Regulation 61(5)) is clear that the competent authority must be certain that there would not be an adverse impact before giving permission. Nitrogen deposition is akin to applying fertiliser, which is listed as an Operation Likely To Damage the special interest of the site for the SSSI. A monitoring and mitigation plan is both necessary and appropriate as part of a precautionary approach.
 - f) At the Wendlebury Meads and Mansmoor Closes SSSI, nitrogen levels are already high enough to require intervention and any further addition of nitrogen would worsen this problem. The application of fertilisers is listed as an Operation Likely To Damage the special interest of this SSSI. The Scheme would increase nitrogen deposition here. A monitoring and mitigation plan is necessary due to the unpredictability of the effects of increasing NO_x deposition.
 - g) A track would be formed by the Scheme across the Wendlebury Meads and Mansmoor Closes SSSI just south of the railway. This would cause the loss of 675 square metres of SSSI. The proposed mitigation is not appropriate and would not improve the SSSI, as claimed by Chiltern. The habitat creation proposed is unlikely ever to attain the quality of the SSSI to be lost, given the current land use; furthermore it cannot replace the ridge and furrow, an historical feature which would be lost and which plays a substantial role in shaping the SSSI vegetation community. The landowners have proposed another option (document Obj185/3, reported at 6.51.9 and 6.55.46) which involves no direct loss of the SSSI and which is the least environmentally damaging option put forward. There is thus an alternative scheme which would avoid loss of SSSI and so Natural England objects to the Scheme proposal. That objection was maintained throughout the Inquiry.
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- h) Nutrient levels influence the current condition of the Hook Meadows and Trap Grounds SSSI, but air emissions are not the main contributory source of nitrogen at this site. Nevertheless, emissions may still have an impact on the condition of the site. As with the other two SSSIs mentioned in paragraph 6.55.70 e) and f), Natural England is concerned with the effect of increased NO_x on the Hook Meadows and Trap Grounds SSSI, and the lack of a monitoring and mitigating plan being implemented.
- 6.55.71 Natural England has been consulted on the draft *Great Crested Newt Survey Report And Mitigation Plan* (document CRCL/P/10/B, appendix 6). Populations of newts along the line may become fragmented by the increase in train numbers. Natural England has advised Chiltern on elements of the plan that may need to be amended for the purposes of obtaining a licence. Natural England would provide a written update if their position changed. Natural England has not received the final Great Crested Newt Mitigation report mentioned in paragraph 4.15 of document CRCL/INQ/60 and so cannot confirm whether it agrees with the applicant's assertions in that paragraph.
- 6.55.72 Bats are present in Wolvercot Tunnel. The Scheme may have an adverse effect on hibernating bats in the tunnel, and bats might collide with the trains. If trains were to pass in the Tunnel, the risk of bat casualties would be greatly increased. There is insufficient baseline survey evidence to enable the effects to be appraised, and the technology for the proposed lighting-based mitigation system does not yet exist. The Version 2 Mitigation Plan (Obj/246/5, Appendix 2) does not give confidence that harm to the bat population can be sufficiently avoided and mitigated. The key concern is the proposed speed of the trains which will, at best, increase bat mortality and, at worst, render the tunnel roosts unusable. Bats are most active late in the evening, between May and October, and a train speed limit of 40 mph in the tunnel in those months between 2100 and 0100 would give certainty that the risk of bat strike as a result of train speed would not increase above the current level (accepting of course that there would be more trains as a result of the Scheme) and would give confidence that bat roosts in the Tunnel would stay in use.
- 6.55.73 Natural England has considered Chiltern's document CRCL/INQ/61. Licences can only be issued by Natural England where the proposed activity would satisfy these three tests:
- The proposed activity should meet the criteria for one of the purposes (in this case, preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment); and,
 - There should be no satisfactory alternative; and,
 - The action authorised should not be detrimental to the maintenance of the species concerned at a favourable conservation status in their natural range.
- 6.55.74 A separate licence is not required for the operational stage of the
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development. However, in order to obtain the licence for the construction phase, the applicant must show that the action would not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range. Favourable conservation status is a judgement made by Natural England partly on the basis of maintenance of the population on a long term basis (that is, including the operational phase).

- 6.55.75 There is currently a lack of evidence to show that favourable conservation status for the bats can be maintained during the operational period and, on the information currently before the Inquiry, there is doubt that a licence would be granted. A lack of evidence that harm would occur does not mean that there would be no harm. Information to give certainty that the works proposed in the tunnel would not be detrimental to the favourable conservation status of the bats will be needed to successfully attain a licence. A licence application made on the basis of the information before the Inquiry seems likely to fail (Obj/246/6).
- 6.55.76 Natural England considers that the proposed lighting scheme would require a licence, and does not agree that this currently untested method would be an effective mitigation measure.
- 6.55.77 In summary:
- a) A draft methodology for works on Oxford Meadows SAC is needed to inform any Habitats Regulations Assessment (whether a screening for likely significant effect or a full Appropriate Assessment);
 - b) Natural England still believes that air pollution could have a detrimental effect on three SSSIs (Port Meadow with Wolvercote Common and Green SSSI, Wendlebury Meads and Mansmoor Closes SSSI and Hook Meadow and Trap Grounds SSSI); and,
 - c) There are serious deficiencies in the bat mitigation proposals which may prevent the grant of a European Protected Species licence.
- 6.55.78 **The Environment Agency** (Obj 248) submitted suggested planning conditions.
- 6.55.79 **The Norman Trust** (Obj 192), **Land and Metropolitan International Developments Limited** (Obj 257) and **Gallagher Estates** (Obj 249) ("the three parties") have interests in the land between the proposed Bicester Chord and Gavray Drive, Bicester. In July 2006, planning permission was granted by the Secretary of State at appeal for development on that land comprising residential and associated development, including a county wildlife site. There is a planning obligation whereby an area of land on the site (plan at Appendix 5 of Obj/249/2W) would be kept available for 15 years for a connection between the main railway line and the Oxford/Bicester line. That arrangement was informed by discussions held with Laing Rail (Chiltern's parent company at the time). Chiltern did not contact the three parties again until the draft Order was published, and now seeks to acquire

significantly more land in the Gavray Drive area than was agreed with Chiltern's parent prior to the planning inquiry in 2006. Chiltern's proposed land take would be more than is necessary for the Scheme and could be reduced by engineering measures in the proposed embankment, such as a retaining wall 3 metres high, or reinforced earth in the embankment to allow a steeper slope. Such a retaining wall would allow the permanent land acquisition here to be reduced from 3.491 acres (the Order scheme) to 1.242 acres (with a retained embankment).

- 6.55.80 Work No. 8 would provide a footbridge to carry footpath FP129/3 over the railway. The footbridge would overlook properties in the proposed development. A subway beneath the railway is technically feasible and likely to have a comparable cost. A subway should be provided in place of the proposed bridge, to avoid injurious affection of the proposed development.
- 6.55.81 The Environmental Statement is deficient in that it does not assess the effect that noise caused by the Scheme would have on the approved residential development.
- 6.55.82 The land proposed to be permanently acquired from the three parties has been identified in the draft Order as Open Space. But the land is in private ownership and, up until recently, was in agricultural use. A public footpath crosses the land and, no doubt, walkers stray from the definitive line but this does not confer on the public prescribed rights. Certainly, to describe the site, seemingly interchangeably, as open space or public open space is incorrect. The land in question is in private ownership and if any members of the public are using it, they are trespassing and in any event will not have been doing so for any length of time. There is therefore no need to acquire exchange land to the east of Charbridge Road.
- 6.55.83 The business case for the Scheme is open to question. Chiltern's estimate of costs allows £11.1 million for the acquisition of land and rights over land. At Gavray Road alone, the Scheme proposal would permanently acquire 3.491 acres of land with planning permission for residential development. That single element would absorb a significant amount of the £11.1 million. This does not support the view that the business case is based on a reasonable assessment of costs.
- 6.55.84 **Mr D van Wijngaarden** (Obj 282) lives in Priory Road, Bicester. Congestion caused by the Scheme at the London Road level crossing may cause an increase in traffic in Priory Road. Chiltern have said that a bridge over the railway in London Road would be too costly; but that is not a justifiable reason to discard such an option. Mr van Wijngaarden proposes an alternative access, shown on page 2 of his letter dated 16 February 2010. A new roundabout would be formed on the A41 a short distance east of the railway. New roads would connect this to (a) the Talisman roundabout, on London Road east of the railway, and (b) the southern end of Station Approach, with a connection to Bicester Village. This arrangement would allow traffic to avoid the level crossing.
- 6.55.85 **Defence Estates** (Obj 284) acts for the Defence Storage and Distribution Agency ("DSDA"). The Rule 15 Notice served by the applicant, dated 6 January 2010, was not clear as to the interests in land

required for the purposes of the Scheme, and so DSDA objects to the Notice, by e-mail dated 16 February 2010.

6.55.86 **Cherwell District Council** (Obj 292) supports the application in principle but, in its letter dated 24 March 2010, objects to these aspects of the Scheme:

- a) The relocation of the aggregate depot into the open countryside and Green Belt north of the site is contrary to Policies SP5 and CO4 of the South East Plan, Policy GB1 of the adopted Cherwell Local Plan and PPG2 *Green Belts* and is therefore inappropriate development for which no very special circumstances have been put forward. (In the South East Plan (CD/4.11), Policy SP5 describes considerations regarding to selective reviews of the Green Belt, and Policy CO4 lists five purposes of maintaining a Green Belt around Oxford. In the adopted Local Plan (CRCL/INQ/40, saved Policy GB1 describes the purposes of the Green Belt – to protect the character and setting of Oxford, to check the growth of Oxford and to prevent the coalescence of settlements; the circumstances in which development in the Green Belt would be approved; and the need for care to protect the visual amenities of the green belt.)
- b) The new bridges at Tubbs Lane crossing and at Islip Mill would have a worrying visual effect on the amenities of the localities by virtue of the bridges' size, height and appearance and, at Islip, on the character and appearance of the Green Belt.
- c) It is not clear how the Scheme would relate to the County Council's Integrated Transport Strategy, the Park and Ride at SW Bicester and modal shift from Bicester north by bus to the station from all parts of Bicester and between the two stations.

6.55.87 **DB Schenker Rail (UK) Limited** (Obj 293) has an interest in the rail aggregates depot (parcel 22012). The depot is a scarce and valuable resource which would cost at least £3.5 million to relocate. DB Schenker had hoped to reach agreement with Chiltern during the Inquiry, but impediments remained:

- The replacement siding would be shorter than that being lost by 20 to 25 metres, which would mean that the standard length of freight train that visits the existing siding would not fit in the new one. Chiltern have proposed to DB Schenker a longer siding, although no plans have been produced, so it is likely that this point will be resolved.
- The standard track layout could not be accommodated in the proposed new aggregates depot site.
- The offered terms of the lease are not acceptable to DB Schenker, particularly with regard to the cost of motorised points and the rental payment.

6.55.88 **SS Philip and James' Church of England Voluntary Aided Primary School** (Obj 313) is located on Navigation Way, near Aristotle Lane. Construction traffic associated with the Scheme would pass close to the School and prejudice the safety of pupils and their families, many of whom walk or cycle to the School. Chiltern should co-operate with the

School to limit the risk.

- 6.55.89 **Peter and Carol Jarvis** (Obj 320) belong to the Trap Ground Allotment Association. There are currently 149 actively cultivated plots at the Trap Ground, of which 50 are held by people over 60 years old. Anyone cultivating a plot must have a minimum level of physical fitness. But Chiltern's proposed solution of forcing members to take a half-mile return detour up and down the equivalent of a two-storey building at a steep gradient, encumbered by heavy loads, would demand a physical stamina which most of the membership would find excessive.
- 6.55.90 If the level crossing was closed, a number of plot holders would be forced to give up. Once a critical number of plots had gone out of cultivation there would follow a steep decline in the viability of the site as a whole, as has happened elsewhere.
- 6.55.91 **The Friends of the Trap Grounds** (Obj 322) manage the Trap Grounds Town Green, an area of woodland and wetland immediately to the east of the railway and immediately north of the Primary School of SS Philip and James (which is located on Navigation Way, near Aristotle Lane). The only official access to the Town Green leads from the canal towpath in the north-east corner of the site. An informal path leaves the Town Green at its south-west corner, passes behind the school playground and ends near the Aristotle Lane bridge over the railway. This path has been in use since 2002/2003, when a previous path was obliterated by construction of the School. The Friends hope that, should the Scheme proceed and provide a car park in this area for the allotment holders, the informal path should not be blocked.

7 OTHER REPRESENTATIONS

The gist of additional relevant points raised in other written representations was as follows.

- 7.1 **Bicester Town Council** (Rep 3)
- 7.1.1 The Town Council supports the principle of the Scheme but considers that the proposed temporary use as a site compound for the Scheme of plot 03014 (land at Garth Park) would reduce the public's enjoyment of the Park. The Town Council also put questions of clarification regarding plots 03017, 03019, 03020 and 03022.

8 THE RESPONSE OF CHILTERN RAILWAYS

Several matters were raised by more than one objector, and I report Chiltern's response to such matters first. I then report Chiltern's response to matters raised by individual objectors.

The material points were:

- 8.1 **Need For The Scheme**
- 8.1.1 The statement from the Secretary of State for Communities and Local Government dated 6 July 2010 states that Regional Strategies have been revoked under s79(6) of the Local Democracy Economic Development

and Construction Act 2009 and no longer form part of the development plan for the purposes of s38(6) of the Planning and Compulsory Purchase Act 2004. Attached to that statement, the Secretary of State published guidance to cover the period between revocation of Regional Strategies and legislation to abolish them altogether. The advice is clear that where local planning authorities are currently bringing forward development plan documents they should continue to do so. The guidance recognises that some authorities may decide to retain their existing housing targets that were set out in the revoked Regional Strategies.

- 8.1.2 A further letter from the Secretary of State for Communities and Local Government dated 10 November 2010 told Chief Planning Officers that the judgement in the case brought by Cala Homes in the High Court, has concluded that the powers set out in section 79 [6] of the Local Democracy, Economic Development and Construction Act 2009 could not be used to revoke all Regional Strategies in their entirety. The effect of this decision is to re-establish Regional Strategies as part of the development plan. However the Secretary of State wrote to Local Planning Authorities and to the Planning Inspectorate on 27 May 2010 informing them of the Government's intention to abolish Regional Strategies in the Localism Bill and that he expected them to have regard to this as a material consideration in planning decisions. Document X/9 brings this evidence together.
- 8.1.3 The Secretary of State has signalled his intention to ask Parliament to revoke Regional Strategies. However, unless or until the Bill receives the Royal Assent the law will remain that Regional Strategies are part of development plans and must be taken into account. That is not diminished by any consideration of their possible abolition. No materiality or weight can presently be attached to the letters of the Secretary of State in respect of prospective abolition of Regional Strategies.
- 8.1.4 Despite the potential move away from regional targets, the underlying drivers for economic growth and new housing in the areas served by the Order Scheme remain. Whilst it is recognised that with the revocation of regional strategies, the precise level of planned growth may change, there remain strong demographic reasons to conclude that substantial growth will continue to be planned for in the Oxford area and that delivering this growth without associated improvements in supporting transport infrastructure will be difficult. The duty to determine appropriate levels of development lies with the Local Planning Authorities. Oxford City Council is continuing to pursue a growth agenda and has resolved to continue with their Core Strategy including meeting the housing targets from the revoked RSS. Policy CS22 of the Combined Changes Document of the Core Strategy, which consolidates the Proposed Changes to Submission (Apr 2009), Examination Changes (July & September 2009), and Further Proposed Changes (April 2010) into one document, includes a housing target of 8,000 homes between 2006 and 2026 which replicates the target in the South East Plan under Policy CO3.
- 8.1.5 Section 38(6) of the Planning and Compulsory Purchase Act 2004 states that *'If regard is to be had to the development plan for the purpose of*

any determination to be made under the Planning Acts the determination must be made in accordance with the plan unless material considerations indicate otherwise'. As stated in PPS1 General Principles, 2004 (paragraph 47), other than in the circumstances where a proposal would have a cumulative effect that would be so significant that to grant consent would prejudice the outcome of the development plan, 'refusal of planning permission on grounds of prematurity will not usually be justified'. It goes on to state that 'account will also be taken of policies in emerging development plans that are going through the statutory procedures towards adoption. The weight to be attached to such policies depends upon the stage of plan preparation or review, increasing as successive stages are reached'.

- 8.1.6 Phase 1 of the Scheme would be financed from passenger revenues. The deliverability of the Scheme, as a whole, would not be affected by any changes in housing strategy or the future rates of housing development in Oxford.
- 8.2 **Access to Trap Grounds Allotments**
 - 8.2.1 Trap Ground Allotments takes access in two ways: via a gate onto Port Meadow (which may be reached via a bridleway bridge), and via a private footpath level crossing at Aristotle Lane. Near the main gate to the allotments are to be found a shed from which allotment holders may buy items, and another for the storage of tools.
 - 8.2.2 The rail industry's Safety Management Information System ("SMIS") database contains three near-miss incidents between trains and users of the Aristotle Lane level crossings between January 1998 and August 2010. The permitted line speed here is 90 mph and, on the basis of that, the available visibility from the level crossing and the time needed to cross the railway at the crossing, the sighting times there are deficient. For a train approaching at 90 mph the minimum sighting distance required is 690 metres. Visibility is measured from the "decision point", 2 metres from the nearest rail. A pedestrian standing at the decision point on the east side of the railway can see 556 metres in the "up" (southerly) direction and 725 metres the other way, while on the west side of the railway one can see 540 metres from the decision point in the "up" direction and 500 metres to the north.
 - 8.2.3 A pedestrian speed of 1.2 metres per second is, by established practice, used to determine the crossing time. Where there is evidence of use by encumbered persons such as at Aristotle Lane, established practice is to increase the required crossing time by 50%. Here, the width of the crossing (13.6 metres) is such that a crossing time of 17.16 seconds is estimated to be needed. A train approaching at 90 mph would take only 12.5 seconds to arrive at the crossing from the point 500 metres away at which it is first seen by the pedestrian. If that point is 550 metres away the train covers the distance in 13.75 seconds. In either case, the sighting distance is well short of the time an encumbered user needs to get across.
 - 8.2.4 The ALCRM assessment of the existing level crossing notes that sighting from the crossing would be improved by cutting back lineside vegetation. But aggressively managing lineside vegetation may harm habitat, and

- vegetation would not be cut back during the nesting season when peak regrowth occurs. Cutting back the vegetation might not eliminate the deficiency.
- 8.2.5 Whistle boards are therefore provided so the trains use their horns to give audible warning of approach. The guidance of HM Railway Inspectorate (CD/3.1) is that whistle boards cannot be relied upon if sited more than 400 metres from the crossing, because other noise may drown out the sound of a more distant horn. Here, the whistle boards are 650 metres and 543 metres from the crossing. No other warning of approaching trains is given to pedestrians at this crossing. The same guidance says that miniature stop lights may be used at footpath crossings, but this would cost at least £250,000 and maybe nearly double that, and could probably not be provided before the existing railway is re-signalled. These would also need to be provided at the suggested new level crossing of the new railway, and so the total cost would be a minimum of £500,000. However, upgrading the existing level crossing by providing miniature stop lights and providing the same on a new crossing of the Scheme railway would be inappropriate because a reasonably practicable alternative route would be provided.
- 8.2.6 The risk associated with use of the crossing in its current form is assessed by the ALCRM at level C3. Closure of the existing level crossing was proposed by the British Railways Board and successive rail infrastructure managers.
- 8.2.7 It was agreed in examination that there are about 6500 level crossings on Network Rail's infrastructure, on which fatalities occur at about the rate of 1 per level crossing per 650 years. The Rail Safety and Standards Board's Annual Safety Performance Report 2009/2010 (CD/3.35) shows that of the 42 pedestrians killed at Network Rail level crossings in the previous 5 years, 22 were at footpath level crossings. The Office of Rail Regulation has said that 35 people were struck by trains at footpath level crossings during the period 1999 to 2009, and that there were 2462 footpath crossings on Network Rail at the end of 2009. There is no comprehensive record of near misses.
- 8.2.8 The Scheme would add a fourth railway track at this point, with a line speed of 75 mph. The new track would sever the access to the level crossing. The existing crossing could not be extended because the widened railway would be too wide to be safely crossed. Chiltern proposes that the crossing should be closed but, if it were to be retained, the new track would have to be crossed by a separate level crossing. If such a crossing were provided it would have an ALCRM score of C4 if used by two passenger trains each way per hour, or B3 if there were four trains per hour each way. The use of wheelbarrows by allotment holders on the crossing encumbers them, increasing the time it takes to cross and increase the risk of a collision.
- 8.2.9 It was agreed in examination that a level crossing of the form shown by document Obj 5/16 could be possible but details must be checked: of the railway alignment, of land ownership, of visibility available to train drivers and to pedestrians, and of the level crossing gates.
- 8.2.10 If a new crossing were provided on the new railway, it would be 5.6

metres wide between decision points. The required sighting distances with trains travelling at the 75 mph maximum speed would be 237 metres. It was confirmed in examination that a level crossing of the new line would comply with the Railway Inspectorate visibility guidance for users. Such a finding does not amount to exceptional circumstances such as would be consistent with introducing a new pedestrian level crossing on the railway network. Risk should be reduced further by reasonably practicable means.

- 8.2.11 The Scheme would provide an alternative pedestrian route between Aristotle Lane and the allotments, by means of the bridleway bridge over the railway (BW 320/10). This would be improved by resurfacing and other improvements to the bridge and its approach ramps, and raising of the bridleway from the end of the western ramp where it crosses an area of Port Meadow susceptible to flooding. Document CRCL/INQ/50 (dated 14 December 2010) and its attached drawings described the proposal. Drawing 64-35/PK/003 shows the proposed raising of the bridleway (termed a "footpath" on the drawings) and drawing 64-35/PK/004 shows the general arrangement of the proposal and longitudinal sections of the ramps, which would be resurfaced in compacted stone (similar to the existing ramp) to form a series of intermediate ramps separated by level "landings" 2 metres long. On the east side the intermediate ramps would each be some 11 metres long with a gradient of 1 in 17, and on the west the intermediate ramps would be some 9.75 metres long each with a gradient of 1 in 15. The proposed arrangement is consistent with the advice of part BD 29/04 of the Design Manual for Roads and Bridges for footbridges which allows, among other things, that "For ramps of gradient steeper than 1 in 20, successive sloping ramps in one line may be used in agreement with the Overseeing Organisation where either no other arrangement of ramps is possible on the site or where it provides more encouragement to pedestrians to use the footbridge by shortening the walking distance." The existing constraints of the site of the footbridge make the provision of changes in direction impractical.
- 8.2.12 Where the path would be raised above its current level on the Meadow, pipes beneath its surface would allow water to pass at times of flood so as to maintain hydrological conditions on Port Meadow, and Chiltern confirmed at the Inquiry that Oxfordshire County Council as highway authority had confirmed that that arrangement would be workable in the long term. Works to the bridge and its approaches (including all works for the Scheme that would take place within 500 metres of Oxford Meadows SAC) would be undertaken in accordance with a method statement that would be subject to the approval of Oxford City Council as local planning authority, Network Rail, Oxfordshire County Council and Natural England. A planning condition is proposed to that effect.
- 8.2.13 Drawing 64-35/PK/003 marks the track across Port Meadow to Walton Well Road (parcel 29011 and others) as a vehicular right of way to be formalised, but the text of CRCL/INQ/50 indicates that proposal to be withdrawn, because it is unnecessary in that:
- a) The bridge is perfectly adequate for allotment holders as well as being safe;
 - b) Informal use of the track over which rights were proposed

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- already occurs, and is controlled by Oxford City Council; and,
- c) Even if there were a realistic possibility of a category of allotment holder physically capable, however slightly, of tending an allotment and being able twice to cross unaided two level crossings but unable to cross the improved bridge, there is no suggestion that those within the category could not take advantage of the existing informal arrangement across Port Meadow to the principal (south-western) entrance to the allotments.
- 8.2.14 Therefore, only temporary access to Port Meadow is required and the following powers are no longer required:
- a) Permanent rights over parcels 29010, 29011 and 30009.
- b) Any rights over plots 29015 and 29016 (formerly permanent and temporary rights).
- c) Any rights over plots 29008, 29017 and 29018 (formerly temporary rights only).
- 8.2.15 No certificate under Paragraph 6 of Schedule 3 to the Acquisition of Land Act 1981 is needed in respect of those rights, and the application made to the Secretary of State for Communities and Local Government is withdrawn so far as relating to those rights.
- 8.2.16 Chiltern is prepared to enter an Undertaking (Appendix B of CRCL/R/109) to Oxford City Council in relation to:
- a) The funding (to a maximum of £12,000 net of VAT) of two disabled parking spaces on the allotment site, should the City Council choose to carry out works to provide such spaces.
- b) The provision of parking spaces for the allotment holders.
- c) The extent of land and rights to be acquired permanently in parcel 29003 for the construction of a maintenance access to the railway and parking for allotment holders.
- 8.2.17 Oxford City Council has stated an intention to transfer land to the east of the railway to SS Philip and James School and retain some of this land as parking for the allotment holders. There has been no transfer of land. Chiltern proposes the parking arrangement shown on drawing 64-35/PK/004 (attached to document CRCL/INQ/50).
- 8.2.18 The distance, from Aristotle Lane near the eastern end of the eastern approach to the bridge, to the centre of the allotments is, via the level crossing, 293 metres or, via the bridge, 479 metres. From the allotment holders' existing car park east of the railway to the centre of the allotment site via the level crossing is 169 metres. The distance from the proposed car park on parcel 29003 east of the railway to the centre of the allotments (via a proposed flight of steps leading from the car park to the bridge) would be 376 metres. Closure of the crossing and the diversion over the bridge would not result in disproportionate inconvenience to allotment holders. And, since the allotment holders currently park on Network Rail land without lawful authority, the provision by the Scheme of lawful parking and steps for them would be a betterment of their rights.
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- 8.2.19 There is a general duty under the Health And Safety At Work Etc., Act 1974 to reduce risk so far as is reasonably practicable. The potential harm to users of level crossings is a factor that must be taken into account. Use of the bridge presents a reasonably practicable alternative to the level crossing and therefore there cannot be any exceptional circumstances necessitating the provision of a new private footpath level crossing over the new railway.
- 8.2.20 Mr Salisbury reports the opinion of the Risk Manager of the South Central Ambulance Service NHS Trust (6.4.15) but provides no evidence that the Trust has considered the risks to their patients and staff associated with crossing the railway via two level crossings with equipment as opposed to the use of the reasonable alternative route the Scheme would provide.
- 8.3 **Noise and Vibration**
- Provision of Noise and Vibration Mitigation***
- 8.3.1 Chiltern is prepared to go well beyond what the law strictly demands of them, by offering mitigation at noise levels below statutory noise levels. Mitigation would be provided following the procedures described in the Environmental Statement and which are set out in the Noise and Vibration Policy ("the Policy") (4.8.31). Chiltern intends that the Policy would apply to Chiltern, who would apply the mitigation necessary for the operation of the route after the works in Phase 1 and Phase 2A (4.1.12), and also to the promoters of the East West Rail scheme who would apply mitigation according to the Policy if and when the works in Phase 2B are constructed.
- 8.3.2 The approach to noise mitigation taken by Chiltern, through suggested conditions and the Noise and Vibration policy, is robust and accords with Circular 11/95 and established practice. There have been only few heavy rail schemes where noise issues have been relevant, but there have been numerous highway schemes. The procedures for noise mitigation in both types of scheme exactly parallel one another. The procedure involves: (i) predicting future traffic flows; (ii) undertaking baseline and future noise predictions; and (iii) designing and providing noise mitigation measures where necessary. If, in due course, traffic flows exceed predictions there is no retrospective assessment of noise levels or further installation of noise mitigation.
- 8.3.3 Chiltern is promoting a sensible phased approach to noise and vibration mitigation. It is also proposing to provide noise mitigation at levels some way below those of the statutory Noise Insulation Regulation levels. There is no statutory requirement to provide mitigation where vibration levels are justified by BS 6472. The procedures for implementing noise and vibration mitigation proposed by Chiltern are robust and achievable in practice.
- 8.3.4 During the period between publication of the Order and the Environmental Statement, and the preparation of proofs of evidence, Chiltern received 152 objections regarding noise and/or vibration. Chiltern has consulted local residents and will continue to address specific concerns that residents raise. Document CRCL/INQ/32 exemplifies that approach and describes further noise modelling undertaken subsequent to the preparation of the Environmental
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Statement and completed in late October 2010. The further modelling indicates that the assessment at representative locations reported in the Environmental Statement generally overestimated the effects of the Scheme although, for reasons given in CRCL/INQ/32, there were discrepancies in the amendments reported at five locations. Letters were sent to objectors with the purposes of:

- Reporting the expected noise effects at objectors' individual properties;
- Explaining the noise mitigation that Chiltern expected to provide as a result of the Policy being implemented, noting that the final form of mitigation would be determined during detailed design before the Scheme is operational; and,
- Explaining the residual effect of noise with this mitigation in place.

Operational Noise

8.3.5 Many objectors raised similar concerns. The following paragraphs set out Chiltern's responses to concerns raised by objectors.

8.3.6 The Scheme would increase train speeds along the route, resulting in increased noise as individual trains pass. Noise mitigation, including over 1.5 kilometres of noise barriers in north Oxford alone, would offset noise increases which result from increased train speeds. Table 3 of document CRCL/INQ/32 summarises the noise modelling results estimated by Chiltern in October 2010. A sample of 52 properties is considered, throughout the Scheme. The residual noise impacts with the expected mitigation are as follows:

Summary Of Further Noise Modelling Results Sent To Objectors		
Residual Noise Impact (dB)		Number of Properties In Sample So Affected
Day	Night	
0	0	43
0	1 to 3	6
3 to 4	7 to 9	3, all at Quadrangle House

8.3.7 The following table gives an overview of the predicted attenuation offered by a 2-metre noise barrier (2 metres high relative to top of rail, horizontally separated from the nearest rail by 2 metres) at the closest properties in the Wolvercote/Lakeside area, with Phase 2 of the Scheme in place:

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Location	Predicted Train Noise Level, dB (L _{Aeq, 16hr})		Barrier attenuation, dB
	Unmitigated	Residual	
Lakeside (1 st floor)	63	48	15
Quadrangle House			
1 st floor	65	58	7
2 nd floor	63	59	4
Blenheim Drive (1 st floor)	60	46	14
5, First Turn (1 st floor)	57	51	6
Ulfgar Close (1 st floor)	57	47	10

- 8.3.8 The final design of noise barriers including selection of material from which they are made would be subject to further detailed engineering work. Calculation of Railway Noise ("CRN", CD/5.12) (4.8.19) says that timber barriers can be suitable if attenuation values up to 17 dB(A) are required, and so the use of timber would be consistent with the figures in the table in paragraph 8.3.7 of this report. CRN is the standard UK guidance procedure for calculating railway noise and predicting the insertion loss achieved by a barrier. The method is specific for railway noise and has been used in the assessment of the effectiveness of noise barriers in attenuating noise from the Scheme.
- 8.3.9 As well as using CRN which uses the L_{Aeq} parameter (assessing noise over a period), Chiltern has considered the maximum noise levels from individual trains. The Environmental Statement reports predicted maximum levels (CD/1.16, in tables 6.12 and 6.13, without the mitigating effect of a noise barrier; and with mitigation in tables 6.22 and 6.33). The increase in noise during the time that an individual train passes by a property in Lakeside is estimated to be 7 dB, without a barrier. The proposed noise barrier would reduce noise by 15 dB for individual trains at Lakeside. Therefore, with the barrier in place the noise from individual trains is predicted to decrease by 8dB from the current noise levels.
- 8.3.10 If the Scheme proceeds, Chiltern will undertake mitigation of the railway in accordance with the Noise Insulation (Railways and Other Guided Systems) Regulations 1996 (CD/5.13). These Regulations set out the UK Government policy for when noise mitigation should be provided for railways. In setting the standards, the Government has taken account of the various guidance documents available in the UK and internationally. Chiltern acknowledges its responsibility under these Regulations and has chosen to offer further non-statutory noise mitigation to reduce the effects of the Scheme, as set out in the Noise and Vibration Mitigation Policy. The intention is to reduce the noise using Best Practicable Means and to offer mitigation to residents on a fair basis.
- 8.3.11 Where noise levels cannot be reduced at source or by the use of noise

barriers, noise insulation of individual properties would be considered and the standard offer of insulation would be double glazing conforming to the Regulations, in which sound reduction is achieved by a large air gap between panes of at least a certain thickness. Triple glazing would not be provided.

8.3.12 Chiltern's responses to other matters raised relating to operational noise are as follows:

- a) Although sustained exposure to noise levels of 75-80 dB might harm human ears, train noise of that level as experienced by a stationary observer would be intermittent and not harmful.
- b) Day-time and night-time periods used in the assessment are set by statute (CD/5.13) and planning guidance in PPG24 *Planning and Noise* (CD/3.4). PPG24 recommends the use of the measurement $L_{Aeq,period}$ for all types of transportation noise.
- c) Chiltern's consultant undertook unattended noise monitoring at Lakeside. The noise record indicates that there were freight trains on 14 and 15 July 2010 at the times stated, but the train movement record does not confirm that. There is no effect on the assessment results, as a cautious method was used, based on the lowest measured results which exclude the periods in question.
- d) Measured baseline noise levels at Lakeside varied between 48 dB(A) and 54 dB(A) at night during the 5-day survey. The lowest value of 48 dB(A) was chosen and the other measurement data were disregarded, which is a cautious approach. There is no discrepancy due to wind direction or other cause.
- e) The present timetable has seven freight trains a day in total. However, trains only run in accordance with market demand and the Network Rail train service database shows that typically only four trains actually run on the line on any given day.
- f) The acoustic effect of two trains passing is a doubling of acoustic energy, but this results in a less than 3 dB(A) change in noise compared to one train. This is not a significant noise change and no "shock wave" as such is audible.
- g) A tunnel is not necessary to achieve satisfactory noise mitigation, which can be achieved by other means. To build a tunnel over the railway would cost several million pounds and would increase the ongoing maintenance cost of the railway. The structure would be very large as its internal height should allow for future electrification of the line, and its width for the safe evacuation of trains in an emergency. It would have a significant adverse visual impact.
- h) The locations where noise mitigation in the form of a noise barrier is likely to be provided are shown in Volume 3 of the Environmental Statement (CD/1.17) Figures 6.1 A to Q.
- i) Noise at St Peter's Road is proposed to be reduced by at-

source measures and a noise barrier. Quadrangle House would be likely to experience maximum noise levels above 82 dBL_{Amax} at the second-floor flats, and so Chiltern intends to implement other noise mitigation solutions, such as noise insulation to windows. This would be a matter of detailed design. Noise at Blenheim Drive is also expected to be high enough to require mitigation under the Noise and Vibration Mitigation Policy and the exact mitigation would be a matter for detailed design.

- j) Lowering the track through Wolvercot tunnel would be by around 600 millimetres and the associated changes in track gradient would be slight and unlikely to have a significant effect on train noise.
- k) Phase 2 daytime noise levels at Wolvercote School would be 59 dB(A), and 57 dB(A) with Phase 1. "Building Bulletin 93" gives UK standards for background noise levels in school classrooms, and identifies 35 dB as desirable. The difference between internal noise and external noise will depend on the design of the school. Even for partially open windows a reduction of the order of 15 dB can be expected, resulting in internal noise levels in Wolvercote School only marginally above the design standards for new schools. Externally, the Phase 2 noise would be only 4 dB (just noticeably higher) than the 55 dB threshold below which significant community disturbance is not expected (PPG24, CD/3.4).
- l) A noise barrier is likely to be required to mitigate noise effects at 14 Whimbrel Close from Phase 1 of the Scheme, and to mitigate train noise at 42 Whimbrel Close from Phase 2. The need for a barrier near 42 Whimbrel Close at Phase 1 will be reconsidered and confirmed during detailed design.
- m) The Scheme, with its proposed mitigation, would have no effect on noise levels at (among other receptors) Mill Farm House, Islip, at 61 Lakeside or at 37 Lakeside. If a 2-metre high noise barrier was erected 2 metres from the nearest rail the Scheme would cause no increase over current ambient noise levels at Ms Rosenberg's property in Lakeside.
- n) If property is reduced in value by the operation of the Scheme, compensation can be claimed under the terms of the Compulsory Purchase Compensation Code.
- o) The predicted Phase 2 operational train noise levels at Alchester Terrace, Bicester, are such that non-statutory noise insulation would then be offered at those properties. Mitigation at source would be implemented where reasonably practicable in Phase 1, but no barrier or insulation would be provided there at that time. The Phase 1 unmitigated noise change here would be 4 dB. The noise changes cited by Objector 194 (6.32.3) relate to Phase 2, and so it is right that associated mitigation measures should be taken then.
- p) The track design in Wolvercot Tunnel has yet to be determined. Best practicable means would be used to reduce

- noise at source.
- q) It is proposed to provide an acoustic barrier on the car park boundary at Oxford station to protect nearby dwellings from increased activity at the station.
 - r) Elm Tree Farm is the property in Wendlebury that is nearest the railway. Noise changes there would be just above the 3 dB point at which a noise change would normally be noticeable, but noise levels would remain below the most stringent standard that applies to new housing.
 - s) Operational noise from the railway is not expected to harm livestock in nearby fields as they are expected to acclimatise to the change in noise from the trains. During acclimatisation, animals will have the option to avoid being close to the railway. The noise of each individual train increases over several seconds as the train approaches, and so is neither sudden nor likely to startle animals.
 - t) It is not normal practice in an Environmental Statement to consider noise-sensitive receptors at properties that have not been built, and for which there are no detailed designs. Although planning permission has been granted for the houses on the Gavray Drive site (6.55.81), the houses have not been designed in detail. Since they would be affected by existing noise sources (road and rail traffic) noise mitigation will need to be considered in the context of layout and noise mitigation design by the developer. Until that information is available it would not be possible for Chiltern to conduct a detailed assessment of the noise impacts from the Scheme.
 - u) Road noise maps on the DEFRA website are intended as strategic planning tools, not detailed projections at individual households. They do not allow for screening by buildings and ground features, and they incorporate corrections for evening and night noise levels which increase the predicted level compared to a measured noise level. If noise levels were in fact higher than measured, the effect of the Scheme would be less than the predictions in the Environmental Statement.

Vibration

- 8.3.13 Vibration from trains would be kept below a very strict limit. In some places, engineering measures would be needed, but there would be no risk of either cosmetic or structural damage to buildings.
- 8.3.14 The Environmental Statement is dated December 2009. At that time, no detailed geotechnical site investigations had been carried out. All relevant data relating to noise and vibration are set out in the ES. The assessment of the noise and vibration impacts has conformed to good practice for a railway scheme at this stage of its development and the assessments in the ES are robust.
- 8.3.15 Further modelling work was undertaken, which confirmed the vibration assessments reported in the ES. Measurements were taken in October 2010 of vibrations caused by passing trains at the house at 55 Lakeside,

as reported in Annex B of document CRCL/INQ/45. The purpose was to establish whether unusually high vibrations were experienced from the current passage of trains. The findings included vibration levels of between 0.27 and 0.55 millimetres per second (mm/sec) associated with freight trains, and from 0.13 to 0.23 mm/sec associated with passenger trains of the type in use there.

- 8.3.16 The ground conditions at Lakeside were then checked from geological maps and it was established that similar clay ground conditions are found at Lakeside as at Kings Sutton, where the vibration effects were measured to inform the ES (4.8.29). This additional work has fully validated the conclusion of the ES that, while vibration may be perceptible, significant impacts are not expected to occur.
- 8.3.17 Buildings may display structural defects such as cracking, and there are various factors that may cause this. Some objectors attribute building damage to vibration caused by the railway. There is no evidence that building damage (that in some cases led to the underpinning of houses that objectors report) was caused by vibration from the railway, and there is nothing in Network Rail's records (which reach back to the stated time of the harm occurring) to indicate that any blame was attributed to railway operations. In responding to objectors Chiltern has asked whether evidence to the contrary is available, but none has been provided.
- 8.3.18 Residents of Quadrangle House are concerned by the prospect of vibration caused by use of the Scheme on their property. Page 6-42 of the Environmental Statement (CD/1.16) says that ground vibration is not expected to exceed the assessment criterion beyond approximately 10 metres from the tracks. Quadrangle House is beyond this distance from the tracks and vibration is not expected to result in significant disturbance. Measurements of vibration carried out since the ES was published have confirmed that no structural or cosmetic damage to property will occur whether within 10 metres of the line or further away. Document CRCL/P/9/B, appendix 3, reports the result of vibration monitoring surveys at Quadrangle House, with existing trains, during 2010 which indicate that individual train movements are likely to be perceptible in the building, but the vibration they produce is well below the level at which building damage is likely. The same was found at "Kareol", Mill Lane, Islip; Whimbrel Close; and Oddington Crossing.
- 8.3.19 In the event that resilient trackforms (as vibration mitigation) were found to be not practicable if required near Whimbrel Close (6.55.8), vibration is not expected to exceed a level at which adverse comments are possible.
- 8.3.20 Chiltern has correctly assessed vibration using the correct indices, PPV and VDV, according to UK standards. Annex D of the Environmental Statement (CD/1.18) gives enough information in terms of measured levels at Kings Sutton, methodology and proposed service details (that is, the assumed service frequency) for estimating VDV levels for the proposed service. Data from the Lakeside vibration measurements were presented correctly and at two levels of detail (in CRCL/R/Obj295, appendix A and then in CRCL/INQ/45).

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- 8.3.21 At Oxford station, train speeds associated with the Scheme would be low and the effect of vibration would not even be in the “low probability of adverse comments” category at nearby residential properties.
- 8.4 **Air Quality and Human Health**
- 8.4.1 The Air Quality assessment in the Environmental Statement (section 13 of CF/1.16) does not recognise any Air Quality Management Areas in Oxford. The Wolvercote roundabout has not formally been declared an AQMA. Instead, it has been discussed as a possible AQMA should Oxford City Council’s preferred option of declaring the entire city an AQMA not be approved. Currently, DEFRA has not formally recognised any changes to Oxford’s existing city-centre AQMA. The City Council resolved in September 2010 to make the Air Quality Management Order necessary to create the new AQMA. There was no AQMA in north Oxford when the assessment was prepared for the Environmental Statement. The diffusion tube monitoring at Wolvercote roundabout mentioned by Dr Robertson (6.20.22) is not suitable for use in defining baseline air quality as part of the environmental impact assessment. It is well understood that roadside concentrations of NO₂ are substantially higher than those found even at short distances away from the road and, in defining baseline air quality, it is conventional to use background air quality when considering effects on a residential area. The air quality assessment presented in the ES is sound and is supported by the measurements presented in the Oxford City Council reports, as explained in CRCL/R/Obj234/B.
- 8.4.2 Traffic modelling shows that, at almost all locations on the road network, there would be no increase in peak hours vehicle flows as a result of the Scheme. Because the estimated changes in peak hour vehicle flows are so small, there would be no measurable changes to the vehicle emissions at the junctions modelled. Road traffic emissions have not generally been modelled in the Environmental Statement or in evidence.
- 8.4.3 The effects of the Scheme on air quality with regard to human health have been evaluated against air quality standards established to protect the most vulnerable members of the population (including children). Air quality standards used in the European Union are derived from World Health Organisation guidelines that reflect the opinions of the leading academic community active in the science of air pollution and health and those guidelines are based on the lowest concentrations known to affect the most vulnerable members of the population.
- 8.4.4 Particulate matter is recognised as the air pollutant most significant with regard to health and is often cited in association with diesel motors. The Scheme would probably increase concentrations of particulate matter at the locations of interest by less than 1% in all cases – a very small change. The incremental concentrations of NO_x would be larger, as a percentage of the relevant air quality standard, but the overall annual average concentration would be far below the air quality limit value of 40 micrograms per cubic metre.
- 8.4.5 Air quality standards are expressed in terms of short-term exposure to peak concentrations (measured in minutes or hours) and long-term exposure (typically measured as an annual average). The standards
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therefore allow for the effects of long-term exposure to pollutants.

- 8.4.6 The assessment undertaken are in line with existing policy and industry best practice and are therefore sufficiently robust to assess the impacts of the Scheme on air quality. It is not likely that there would be significant impacts on air quality either in the short or the long term. The conclusion in section 13.4.4 of the ES (volume 2, CD/1.16) is that emissions from freight and passenger rail sources would not have a significant impact on residential properties in the closest proximity to the railway for a fully operational dual track system between Bicester and Oxford in Phase 2 of the Scheme. The same consideration applies in respect of air quality changes at Alchester Terrace due to the Scheme. Table 13.12 of the ES (CD/1.16) shows the total concentrations, with the Scheme, of various pollutants at Receptor 18 (among others), identified in Table 13.3 as the closest properties to the railway in London Road. The predicted annual mean concentration of NO₂ is 22.6 µg/m³ (56% of the UK Air Quality Standards limit) and that of PM₁₀ particulates is 22.0 µg/m³ (55% of the AQS limit).

8.5 **The Business Case**

- 8.5.1 Despite the potential move away from regional targets, the underlying drivers for economic growth and new housing in the areas served by the Order Scheme remain. Whilst it is recognised that with the revocation of regional strategies, the precise level of planned growth may change, there remain strong demographic reasons to conclude that substantial growth will continue to be planned for in the Oxford area and that delivering this growth without associated improvements in supporting transport infrastructure will be difficult. The duty to determine appropriate level of development lies with the Local Planning Authorities. Oxford City Council is continuing to pursue a growth agenda and has resolved to continue with their Core Strategy including meeting the housing targets from the revoked RSS. Policy CS22 of the Combined Changes Document of the Core Strategy, which consolidates the Proposed Changes to Submission (Apr 2009), Examination Changes (July & September 2009), and Further Proposed Changes (April 2010) into one document, includes a housing target of 8,000 homes between 2006 and 2026 which replicates the target in the South East Plan under Policy CO3.
- 8.5.2 Phase 1 of the Scheme would be financed from passenger revenues. The deliverability of the Scheme as a whole would not be affected by any changes in housing strategy or the future rates of housing development in Oxford.
- 8.5.3 Oxford already has substantial inward and outward commuting, reflecting employment opportunities and housing costs which the Scheme would not change. But the Scheme would assist recruitment in Oxford, by improving opportunities for travel-to-work trips to Oxford from, for example, Bicester.
- 8.5.4 Carrying out the Phase 2 works to Wolvercot Tunnel at the same time as Phase 1 works would save significant public expenditure and avoid disruption to rail users.
- 8.5.5 As to the Scheme finances:

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- a) The capital cost of the Phase 1 Scheme would be £122 million. The capital cost is then spread over 30 years at 6% to create an annual Facility Charge. The business case is made by comparing the total revenues over the period 2012 to 2021 with the total costs over the same period. The total incremental farebox revenue arising from the Scheme between 2013 and 2021 is estimated at £157 million.
- b) The Facility charge of £116.5 million is the total of the annual facility charges between 2012 and 2021 based on the capital costs of Phases 1 and 2A. If the DfT withdrew its request for Phase 2A of the Scheme then the corresponding payment would also be withdrawn but the cost of the Scheme would fall too.
- c) Mr Withrington's assumption (6.53.4) for maintenance and renewals costs is incorrect. The sum of £26.3 million is an estimate of the incremental cost of maintaining and renewing the additional infrastructure created by Phases 1 and 2A, and should not be confused with other types of track access charge.
- d) The incremental train operating cost of £7.6 million (4.1.16) is the incremental cost of operating the services which the Phase 1 Scheme would create, and includes fuel and maintenance costs. There would be no need for new or additional trains as a consequence of the Phases 1 and 2A Schemes. Trains that already run between London and Bicester would be extended to Oxford. This is possible in large part due to journey time improvements expected to be generated by current improvements on the line between London and Banbury. These trains are class 168 diesel multiple units, presently used by Chiltern for most long-distance services in the London to Birmingham corridor.
- e) The third-party agreements charge (4.1.16) is a payment from Chiltern to First Great Western, approved by the Department for Transport.
- f) Phases 1 and 2A of the Order Scheme are financed by their users. Chiltern Railways does not recognise the statement that Chiltern Railways costs the taxpayer £60m a year. In 2010 Chiltern Railways will not receive any subsidy from DfT, but will instead pay a premium to the DfT. To the extent that Chiltern Railways has received a subsidy in the past, this is to support the existing DfT core specification for the Chiltern Railways franchise, that is, the existing passenger services. There is no DfT subsidy for the incremental outputs created by the Order Scheme.
- 8.5.6 The majority of the works (the four passenger stations and associated car parks, the Bicester Chord line, the new Chiltern line between Oxford North junction and Oxford station, and the increase in line speeds) would only be of use for passenger operations. Chiltern does not operate freight trains. There are no freight grants associated with the Scheme:
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freight grants are paid to freight operators and users for individual freight projects.

- 8.5.7 The Scheme will form part of the national rail network and the line can thus be used by any train operators. DB Schenker is one of five competing rail freight operators in the UK, and is moreover a minor player in the transport of maritime containers, which is the rationale for the Phase 2A works. It would thus be pointless for Deutsche Bahn to promote the Scheme for freight, as the benefits would mostly flow to its competitors. The Scheme is not being promoted for the benefit of DB Schenker.
- 8.5.8 Rail and coach markets are not analogous and it is misleading to summate them. And the "megabus" express coach (6.53.6) achieves low emissions per passenger-kilometre because it requires prior registration for all tickets and operates only at times of guaranteed demand, whereas the train operates a "turn up and go" service throughout the day and thus has a lesser load factor. Additionally, the megabus is slower than the train and does not have wheelchair-accessible toilets. It is a poor comparator.
- 8.5.9 Rail traffic growth can be attributed to several factors, including road congestion, housing and business locations, and improved rail services, as well as changes in Gross Domestic Product. These factors point to continuing rail growth, and help explain why in recent years rail traffic growth has outstripped GDP. Rail passenger traffic grew by 17% between 1977 and 1997. Rail passenger kilometres rose by 5.2%, and passenger journeys by 6.1%, in Quarter 4 of 2009/10 compared with Quarter 4 of 2008/9, despite the poor performance of the national economy.
- 8.5.10 The following table shows equivalent time components for Witney to London within the catchment model. The initial column shows actual travel time, whereas the second column shows the generalised time in which the model works, which includes components for service frequency and the need to interchange and a weighting for the drive time. In both currencies the journey via Water Eaton Parkway is quicker. A weighting factor of 4 is applied to driving time because drive time is uncertain and costly on the congested roads in the Witney/Water Eaton/Oxford area.

Journey Times and Generalised Times (minutes), Witney to London				
	Using Water Eaton Parkway		Using Oxford	
	Journey time	Generalised time	Journey time	Generalised time
Drive time	20	80	25	100
Journey time	58	58	61	61
Frequency	2 trains/hour	25	4 trains/hour	14
Interchange	None	0	Some (at Reading)	5
Total time	78	163	86	180

- 8.5.11 The economic analysis correctly reflects DfT appraisal methods.
- 8.5.12 Doctor Hope (6.55.42) is right to say that no data describing other modes has been included in the forecasting of demand between this area and London. Where there is a relatively mature rail market and the change is incremental, guidance (in WebTAG unit 3.15.4, and hence in the Passenger Demand Forecasting Handbook) is to use an elasticity approach based on the existing rail market. Unit 3.15.4 (CRCL/INQ/23) explains that multi-modal models have a number of key weaknesses when used to forecast the demand for rail travel. They are expensive to build, maintain and use. Accurate calibration is problematic because of the difficulty of collecting the necessary data. And the available multistage models are less accurate when forecasting demand for minority modes such as rail (which constitutes between 2 and 3 per cent of all journeys within Great Britain).

Land Values in the Business Case

- 8.5.13 The owners of land in Gavray Drive question the scheme budget allowance for land acquisition (6.55.83). They have a high aspiration regarding their site's collective value. It has planning permission for low density residential development, with a number of wildlife and other requirements within the section 106 agreement that affect the value placed on it in a difficult development market. Having consulted local land agents and having applied a number of valuation methods, Chiltern is satisfied that its valuation is robust. In the absence of agreement, this would be a matter for the Lands Tribunal.

8.6 Safety

- 8.6.1 Railways in the UK have one of the best safety records of any land based transport system anywhere in the world. The chance of a derailment occurring on the Scheme would be negligible. The detailed design would be subject to approval by Network Rail and the Scheme would be built and maintained in compliance with all current safety standards.

8.7 Human Rights

- 8.7.1 Article 8 of the European Convention on Human Rights (which is Schedule 1 to the Human Rights Act) provides as follows:

"Right to respect for private and family life:

- 1 Everyone has the right to respect for his private and family life, his home and his correspondence.*
- 2 There shall be no interference by a public authority with the exercise of this right except such as is in accordance with the law and is necessary in a democratic society in the interests of national security, public safety or the economic well-being of the country, for the prevention of disorder of crime, for the protection of health or morals, or for the protection of the rights and freedoms of others."*

- 8.7.2 The First Protocol of the European Convention on Human Rights states *"No one shall be deprived of his possessions except in the public interest and subject to the conditions provided for by law and by the general principles of international law"*.

- 8.7.3 If the Order were made, the acquisition of land and the construction and operation of the Scheme would be in accordance with the law. The railway would bring economic and social benefits, as set out elsewhere in this report (4.2.2 to 4.2.14, and 4.4.13 to 4.4.17). Any adverse effect of the Scheme would be proportionate and outweighed by the wide-ranging public benefits that it would bring.

8.8 **Suggested Modifications To The Railway Proposal**

Alternative Alignment West of Peartree

- 8.8.1 Mr Taylor and Dr Robertson argue that the alignment of the Scheme should be modified to take the railway to the west of the Peartree intersection (6.22.3, 6.20.30). That route is not viable because:
- a) The levels of the railway would conflict with those of the roads that would have to be crossed and the Oxford Canal. The new section of railway would need to cross the A34, A44 and possibly the A4260 and A4165 roads as well as the Oxford Canal, all in relatively close succession. For the railway to pass under the roads and the Canal, the line would need to be some 7 metres below ground in a cutting or tunnel, and would require ramps 700 metres long. Drainage would be a particular problem and a pumped drainage system, probably running continually, would be needed. If the new connecting line were to pass over the roads and canal, it would need to be elevated some 14 metres, requiring ramping to start some 1.4 kilometres away
 - b) The alternative route would be totally new, whereas the Scheme would use an existing railway alignment. The environmental impacts of a new route in a green-field site would be significantly greater than the route proposed, and the vertical alignment previously described would influence this.
 - c) Additional and separate capacity would be required on the Didcot-Banbury line between Oxford station and the suggested connection to the new route, and so that railway would need to be widened. This would include the section passing adjacent to the Hook Meadow and Trap Grounds Site of Special Scientific Interest and the Port Meadow with Wolvercote Common and Green SSSI.
 - d) The Alternative, whether in tunnel or elevated, would be extremely costly to build, and during construction would disrupt the local road network. The extra cost would make the scheme unviable.

8.9 **Road Traffic Implications of the Scheme**

Generally

- 8.9.1 Suitable highway mitigation measures have been included as part of the Scheme to ensure that vehicular traffic from the Scheme would be satisfactorily accommodated on the local highway network.

Implications in the Oxford area

- 8.9.2 The A4165 Banbury Road corridor near the proposed Water Eaton

Parkway station was modelled in detail for the weekday AM and PM peak time periods by the S-Paramics micro-simulation traffic model. The model development and forecasting is reported in document CD/2.25. The model has been built in accordance with the "Micro-simulation Good Practice Guide" produced by SIAS Ltd, the developers of the S-Paramics package. The 2009 base year model has been validated in accordance with the relevant criteria from the Design Manual for Roads and Bridges and is suitable for forecasting future conditions and for testing future highway and development proposals in the study area. The modelling finds that the Scheme proposals would significantly improve the operation of the site access junction and the local A4165 corridor as a whole. The remodelled road layout has been subject to an independent Stage 1 Road Safety Audit and no significant design issues were identified. Chiltern continues discussions with Oxfordshire County Council, as local highway authority, regarding the details of the design.

- 8.9.3 The residual effects of the Scheme on road traffic at Oxford station would be of negligible magnitude and slight/negligible significance. There would be a small reduction in traffic on the Botley Road in 2026 with Phase 2 of the Scheme. Figure 11.32 of the Environmental Statement (CD/1.17) shows 2026 AM peak hour 2-way traffic flow on Botley Road near the station to be 1417 vehicles with no rail scheme, 1384 vehicles with the Order Scheme, and 1384 vehicles with the Order Scheme and the East West Rail scheme. Therefore, no further road traffic impact assessment work has been undertaken at Oxford station.
- 8.9.4 Gosford and Water Eaton Parish Council argues for an on-street parking management scheme (6.55.11). The new Water Eaton Parkway Management Group would manage and monitor the operation of the Water Eaton Park and Ride and Parkway Station. Appendix B of document CRCL/INQ/66 provides some details. The entire road network shown on the plan included in Obj/33/1 (Appendix D, page v) is covered by the technical assessment. In this way, the impact of the Scheme on that area of the local road network has been considered.

Implications in Bicester

- 8.9.5 The Scheme would increase railway traffic across the London Road level crossing. The typical crossing closure times would be approximately 2 minutes each for passenger trains and approximately 2½ minutes each for freight trains. In 2016 and 2026, the Chiltern passenger services would result in four passenger trains crossing London Road per hour. Addition of the East West Rail services would result in a total of eight passenger trains using the crossing each hour, and the level crossing would be closed for 16 minutes in the hour. There would also be freight services, assumed to be in the order of two freight trains per hour (one in each direction), and in that case the crossing would be closed for approximately 20 minutes in an hour.
- 8.9.6 Options to provide a road bridge in place of the London Road level crossing were considered during the Scheme development (4.5.7) but were rejected because:
- None of the options provided an entirely satisfactory solution;
 - All had considerable adverse property impacts; and,

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- The land and property costs involved in acquisition of land and demolition of existing properties could not be justified.
- 8.9.7 A pedestrian and cycle bridge at the London Road crossing would, due to constraints on the site and the need for ramps, involve a detour from the normal route along London Road that would deter many users from crossing on the bridge and the small overall benefit would make such a bridge not worthwhile.
- 8.9.8 The rebuilt crossing surface at London Road will be designed to comply with the latest standards. There is not enough space to realign the road to provide a perpendicular crossing, but the footways would be widened. The Scheme would provide a pedestrian and cycle link from the rebuilt Bicester Town station to the Shopping Village, and hence the A41 via Pingle Drive; but general policy in the area is to avoid creating a short cut for motorists between London Road and Pingle Drive, due to congestion on the latter.
- 8.9.9 Objectors suggest (6.37.2) that Bicester Town station could be relocated to the north of London Road, although they do not identify a specific site. Such an option was considered in the Bicester Town Station Options Report (CD/2.17), in which option the station building would have been located on the northwest side of the railway. It was rejected because:
- The identified land for parking (a multi-storey car park) lies in Flood Zone 3. The Environment Agency would resist such a proposal. And it would be undesirable for a car park, where the vehicle owners will generally be many miles from their vehicles for an extended period, to be in a location susceptible to flooding.
 - The land is subject to a planning application for residential development (Ref. 09/01592/OUT) which, if granted, would make the land unaffordable. Even without such permission, the redevelopment value of the land would be likely to make it expensive.
 - The option would disperse elements of the station so as to make it inconvenient to use, and the car park would be unacceptably far from the station.
- 8.9.10 It is clear from the Bicester Town Station Options Report (CD/2.17) that a number of alternative options for the station layout were considered, but all had considerable drawbacks compared with the promoted option.
- 8.9.11 The London Road/Station Approach junction would be modified so that the angle between the two roads would be less acute, and to better accommodate right-turning traffic on Station Approach and on London Road. During construction, access to the retained land served by Station Approach would be a matter for agreement between the parties.
- 8.9.12 The Westholm Court junction has been included in the S-Paramics traffic model. The highway proposals have been subject to a Stage 1 Road Safety Audit and no significant design issues were identified.
- 8.9.13 Gavray Drive may have once been intended to connect to Launton Road but there is not enough space for a bridge ramp between the railway and Launton Road and a level crossing would be contrary to the railway safety policy presumption against new level crossings.
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- 8.9.14 The provision of additional bus services to Bicester North station would be welcomed by Chiltern but in the current deregulated environment it is a matter for bus operators to instigate. But Chiltern proposes to undertake discussions with bus operators for joint marketing initiatives on bus routes serving Water Eaton Parkway and Bicester Town.
- 8.10 **Mill Lane, Islip and Work No. 16**
- 8.10.1 The representation of the boundary of the Islip Conservation Area in the Planning Direction Drawings was taken from the Proposals Map of the Adopted Cherwell Local Plan, 1996, and the Non-Statutory Cherwell Local Plan, 2004. The revised Islip Conservation Area boundary was approved on 7 April 2008 by Cherwell District Council, and is shown in Appendix B of document CRCL/R/Obj294.
- 8.10.2 The Parish Council refers to the visual effect of the proposed bridge when approaching Islip from Kidlington (6.23.4). The available views from this approach feature the church of St Nicholas in the skyline and, given the distance and scale of the proposed bridge, it is likely that the proposed bridge would barely feature in those longer views. The photomontages in Appendices C and D of CRCL/R/Obj294 were all selected to illustrate the views from key viewpoints, likely to be seen on a continuing basis by local residents. The bridge would not be a significant component of the view from the north or the north-west, and so no photomontage is provided from there. The bridge and ramp to the south of the railway would cover only 11% of the field in which it would be sited and, by keeping the approach path parallel to the railway, the field would appear the same size as now. The field is important to the character of this part of Islip. The bridge would not cut the skyline, it would be in line with the existing hedgerows and vegetation along the railway corridor and it would not be dominant as a feature in the rural skyline. The proposed landscaping would naturalise the bridge. The field would deliver the same visual separation between Mill Farm and the rest of the village as it has done historically. The bridge would be some 100 metres from Kareol, the former crossing keeper's cottage, but much closer to The Grange. Chiltern does not intend that the bridge should be lit, and the County Council (which would be responsible for the route across the bridge, once it was complete) agrees; but it may be that at some time in the future the County Council might, perhaps in response to local representations, decide to install lighting on the bridge.
- 8.10.3 Those elements of the Scheme, such as Mill Lane bridge, that might be considered inappropriate development in the Green Belt are justified by the "very special circumstances" justifying the Scheme.
- 8.10.4 The Parish Council favours a subway option, identified in the Alternatives report (6.23.8). The subway option has these characteristics that lead to the conclusion that it should not be pursued:
- Drainage of the subway would be necessary and it might need to run continuously. The long term upkeep of the system would be a matter for the County Council.
 - The subway would require significant construction works which would lead to long disruption and nuisance to local residents.
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- The subway would require extensive land take outside the Order limits.
- Hedgerows would be lost.
- The character of Mill Lane would be adversely altered in that its long-enduring character as an at-grade road and level crossing with open shoulders and vegetation on either side, with glimpses through the hedges of the villages and surroundings, would be lost.
- The subway alignment would be curved and so forward visibility along it for users would be poor.
- There would be a severe visual impact on Kareol (the former keeper's cottage) and the outlook from the front of Kareol would be altered, although this effect could be mitigated to a degree by planting.

8.10.5 Chiltern is aware of, and concerned by, the existing issue of restricted access in the vicinity of Mill Street at times of flood. Due to the importance that Chiltern places on resolving this issue, Chiltern has made the specific commitment that the level crossing at Mill Lane Islip would not be closed permanently until a detailed assessment of any increase in flood hazard, in particular the safe access and egress of residents of properties in Mill Lane and Mill Street, and appropriate mitigation, has been submitted to and approved by the local planning authority in consultation with the Environment Agency.

8.10.6 Large parked delivery vehicles in Mill Street may occasionally block it to other traffic. But such occasions will be infrequent. A June 2010 survey over four days in nearby Mill Lane did not show any use of that Lane by HGVs. If such a vehicle was obstructing an emergency vehicle the driver of the HGV would be required to move the vehicle immediately. Such a situation is no different from that which currently exists. The Oxfordshire Fire and Rescue Service has been consulted about the proposed closure and offers no adverse comment (CRCL/P/8/B, Appendix 10).

8.11 **Ecological Effects**

Oxford Meadows Special Area of Conservation

8.11.1 The Oxford Meadows SAC is designated as it supports lowland hay meadow habitat and creeping marshwort. The lowland hay meadow covers only part of the SAC (the areas also included in the following three Sites of Special Scientific Interest (SSSIs): Pixey and Yarnton Meads SSSI, Wolvercote Meadows SSSI and Cassinton Meadows SSSI). The rest of the SAC (which is the area covered by Port Meadows with Wolvercote Common and Green SSSI) is designated for supporting creeping marshwort. The only area close to the Scheme, and which therefore could be affected by the Scheme including the effect of air emissions, is designated for supporting creeping marshwort only, and not for lowland hay meadow. Figure 1 of document CRCL/INQ/74 presents a plan showing the parts of the SAC designated as including Annex 1 habitats (lowland hay meadows), and the area where creeping marshwort has been confirmed or contains habitat suitable for this species to occur.

8.11.2 The only potential effects on the creeping marshwort from the Scheme are from air emissions. Creeping marshwort is tolerant of nitrogen and so the creeping marshwort on the Meadows would not be affected by the

- Scheme. The only additional air emissions which could combine with those from the Scheme are from traffic associated with developments such as the Northern Gateway. Air emissions from traffic disperse to insignificant levels within 200 metres, and there are no roads within that distance of the marshwort at Port Meadow. There is no risk of in-combination effects from traffic.
- 8.11.3 Chiltern has explored, at length, the potential for implementing an air quality monitoring arrangement on Port Meadow and the other SSSIs, but has concluded that such a scheme would be neither necessary nor practicable.
- 8.11.4 The traffic modelling for the Order Scheme includes, for the 2026 scenario, development of the potential Northern Gateway and other strategic developments in Oxford. The Central Oxfordshire Traffic Model (4.7.16) meets the DMRB validation acceptability guidelines in the Study Area, and the models for AM and PM peak hours are considered suitable tools for use in assessing future year traffic flows. The peak hours are shown in Annex B of CRCL/P/8/G to be 0800 to 0900 in the morning, and 1700 to 1800 in the evening. The peak hour flows reflect the whole day; the modelling had been carried out in accordance with WebTAG and it would be peculiar if the results of that work could not be applied to the whole. And the modelling concludes that the impact of traffic on the surrounding highway network, including the Wolvercote, Cutteslowe and Loop Farm roundabouts and the Peartree interchange, would be small and traffic flows through those junctions would generally reduce with the introduction of the Scheme.
- 8.11.5 The Oxford Core Strategy Policy CS6, when adopted, will require further explicit traffic modelling and assessment of the air quality effects of the Northern Gateway traffic on the SAC lowland hay meadows (which are closer to and may be affected by traffic on the A34 that passes through the SAC). The policy explicitly requires the Northern Gateway development to be scaled back if any adverse effects on the SAC are identified. This is to be secured by the policy text set out in paragraph 4.154(ii) of the Inspectors' findings in document Obj123/2, the Oxford Core Strategy Examination report.
- 8.11.6 The Northern Gateway development proposal is at a very early stage in its statutory approval process. Even when the Core Strategy is adopted, further studies and an Area Action Plan are to be progressed, before any development permissions are sought. The nature and timing of development are very uncertain.
- 8.11.7 The conclusion can safely be drawn from the evidence summarised above that the Scheme and the other major developments which may occur – in particular, the Northern Gateway – will not give rise to adverse “in combination” effects through air emissions, on the designated species and habitats of the SAC.
- 8.11.8 As to hydrological changes on the Meadows associated with the Scheme, there would be no change to the groundwater regime. The only possible effects on surface water would be as a result of raising the bridleway. Natural England, in paragraph 2.5 of Obj 246/3, endorses the proposed raised path solution with sloping sides and drainage pipes beneath,

- providing that a planning condition is imposed to regulate the methods used in carrying out the works.
- 8.11.9 The footprint of the proposed works in Flood Zone 2 represents minimal land take in an area bordered by existing urban development. Considerably larger areas classified as Flood Zone 2 and some areas of Flood Zone 1 are located to the north, and to the south, further from existing potential sources of disturbance and suitable for livestock and horse flood refuge. The proposed works on Port Meadow would not materially restrict the ability to provide flood refuge on higher ground.
- 8.11.10 Raising the bridleway would have no adverse effect on the integrity of the SAC, providing that an appropriate condition is imposed, because:
- a) The works would be limited to a very small proportion of the SAC (0.07%).
 - b) The works would not affect the qualifying interest habitats or species for which the site was designated. The unimproved hay meadow lies elsewhere, and the creeping marshwort is on the opposite side of the access track.
 - c) The Environment Agency has agreed that flood compensation storage can be provided and there would be no increase in flood risk.
 - d) The effects would be temporary. The habitats affected would be replaced and restored once construction is complete and there would be no long-term effects. Method statements would be required through a planning condition. Natural England has agreed to this approach.
 - e) Between 15 and 20 lorry trips would probably be needed to deliver materials for the path raising. These lorries would travel to and from the construction site along the existing concrete track from Walton Well Road, but they would not encroach on the SAC habitat.
- 8.11.11 Neither of the two effects is significant alone, and they would not combine to become significant because the raising of the bridleway would not affect the creeping marshwort.
- 8.11.12 The extra pedestrian traffic on the bridleway would be small in number. They would use the hardened stone bridleway. They are unlikely to range more widely across Port Meadow. Therefore it is inconceivable that they would be the cause of harm to the creeping marshwort, the primary reason for the designation of the site under Annex I to the Directive, or on the lowland hay meadow, the habitat that is the primary reason for designation under Annex II of the Directive.

Appropriate Assessment Of The Scheme's Effect On Oxford Meadows SAC

- 8.11.13 There would be no implications for the SAC in consequence of the project in view of the SAC's conservation objectives. There is no likelihood of a significant effect on the site, and so the integrity of the site would not be adversely affected. Should an appropriate assessment nevertheless be found necessary, the following considerations would be relevant:

- a) There is no alternative solution. To improve an existing railway line between Oxford and Bicester, so as to secure services between Oxford and Marylebone, does not allow for an alternative solution other than using existing railways together with a short connecting chord.
- b) There are imperative reasons of overriding public interest and they are, in essence, coincident with the "very special circumstances" necessary to justify inappropriate development in the Green Belt (4.11.27).
- c) There would be no consequential impact on the overall coherence of the Natura 2000 network. It would plainly be an untenable suggestion even to hint that the overall coherence of Natura 2000 would be affected, and no-one has done so.

Commentary On The Environmental Statement

8.11.14 The Environmental Statement presents an assessment of the effects that air quality changes caused by the Scheme would have on sites of nature conservation interest. That assessment has been reviewed, leading to the following findings:

- a) The ES wrongly applies to SSSI interests more stringent guidance drawn up for the assessment of impacts on qualifying interests of European sites of nature conservation importance. The grasslands in the Port Meadow with Wolvercote Common and Green SSSI are not of the lowland hay meadow type which contributes to the Oxford Meadows SAC designation.
- b) The critical loads/levels for unimproved hay meadow which are used in the ES are over-precautionary, for the reasons given in section 3 of document CRCL/INQ/74.
- c) The ES assessment is taken at the boundary of each SSSI nearest the railway and so does not reflect the levels/loads across the greater part of each SSSI, as the levels/loads decrease with distance from the source.
- d) The assessed emissions of nitrogen oxide from trains are an over-estimate in the case of Port Meadow with Wolvercote Common and Green SSSI in that the assessment assumes train motors to be operating at full load whereas that would only be the case over 12% of the SSSI's frontage to the railway, and emissions would be less for the remaining 88%.
- e) There is evidence of inappropriate management of some parts of the SSSIs, likely to cause more harm than emissions from the Scheme.
- f) By encouraging modal shift away from cars, the Scheme is likely to reduce the contribution of road traffic to air pollution at the SSSIs.

Port Meadow with Wolvercote Common and Green SSSI

8.11.15 The habitats in the SSSI which would be affected by deposited nitrogen over the 1% critical load threshold, based on the assessment in the Environmental Statement, are predominantly MG6 and MG1 (with only

smaller areas of MG13, MG5 and MG11). The locations of these communities in the SSSI are shown on Figure 2 of CRCL/INQ/74. The MG1 and MG6 communities are in very poor condition. The MG1 community has not been managed, and the MG6 grassland appears to have been subject to improvement through reseeded and disturbance. The MG6 community in particular is probably incapable of recovery. Additional nitrogen input to these habitat types is unlikely to affect the status of either habitat type significantly.

- 8.11.16 The MG5 community has a patchy appearance with some areas which are species rich while others are species poor. This seems to be due to rather extensive grazing during the spring.
- 8.11.17 The MG11 and MG13 communities appear to be in good condition. However, the prevailing conditions in these habitats as a result of factors such as intensive grazing and regular flooding are unlikely to support those invasive plant species which are also tolerant of high levels of nutrient. Taking this into account, with the fact that the levels of deposited nitrogen predicted on these habitat types are at the low end of the critical load range, means that such increased nitrogen is unlikely to have significant effects on these habitat types.
- 8.11.18 Nitrogen emissions from the Scheme would therefore have no discernible effect on this SSSI.

Hook Meadow and Trap Ground SSSI

- 8.11.19 The highest loads of deposited nitrogen would occur at the part of this SSSI which lies east of the railway (1.15 kilograms of nitrogen per hectare per year at the site boundary). The loads which are predicted to the habitat west of the railway, which is type MG4 and of arguably greater nature conservation importance, is approximately 0.5 kg N/ha/year. Hence the total deposition rate here would be 21.7 kg N/ha/year, close to the lower end of the critical load range (which is 20 to 30 kg N/ha/year). The main areas affected would be the areas where the grassland habitats have declined the most (due not to existing nitrogen inputs, but to a lack of appropriate management and flooding from a leak in the nearby canal) to the extent to which nitrogen would not have significant impacts on the habitat. Given the low levels of predicted nitrogen deposition from trains on the Scheme and the site's unfavourable conservation status, there is no evidence that nitrogen deposition from the Scheme would have any discernible adverse effects on the integrity of this SSSI.

Wendlebury Mead and Mansmoor Closes SSSI

- 8.11.20 The provision of the proposed access track across the SSSI can be justified and should be included in the Scheme. Evidence from grassland habitat restoration schemes elsewhere suggests that the site of the barn can be restored over time with a plant community which is diverse and reflects that of the immediately adjoining SSSI meadow. Although the new track would necessarily remove a narrow section across the surviving ridge and furrow, that loss would be of no significance in historical terms and there would be no significant adverse effects on the plant communities in the immediately adjacent meadow. Details of the delivery of the new habitat creation at the barn site could form part of a

planning condition.

- 8.11.21 The predicted total deposition rates of nitrogen at the SSSI boundary are at worst in the middle of the critical range. The predicted total concentrations of airborne nitrogen at the SSSI boundary are only marginally over the critical level (30.5 µg/cubic metre compared with 30 µg/cubic metre). Almost the whole site would receive less than 10 µg/cubic metre, and hence the total concentration would be less than the critical load. The vast majority of the site would receive less than 7 µg/cubic metre. The SSSI would not be significantly affected by NO_x emissions. Fields in the SSSI and closest to the railway are in a good condition, indicating that emissions do not affect their condition. There is no reason to believe that impacts to the habitats in the SSSI would be discernible.
- 8.11.22 The hydrological effect on the SSSI of the proposed track has been investigated. The investigation report is document CD/2.31. The findings confirm that tracks in the proposed locations would have no impact on the surface water and shallow groundwater of the SSSI.

Gavray Drive Meadows Local Wildlife Site

- 8.11.23 The Environmental Statement (CD/1.16, page 8-55) and the Landscape and Ecology Enhancement Strategy (CRCL/P/12/B, appendix 13) wrongly state the land take for the Scheme as being 12% of the Local Wildlife Site. This included land for the permanent footprint of the embankment (for the Bicester Chord) and for a maintenance access at the foot of the embankment for Network Rail. The proposed acquisition of land currently in the LWS north of Gavray Drive includes land that would in any event be lost for the previously-permitted housing development (CRCL/P/12/F, figure 1B). The net area to be lost to the Chord would therefore be only 2,054 square metres, or no more than 2% of the total area of the LWS west of Charbridge Lane. It is a very narrow strip along the wildlife site's north boundary, next to railway land (CRCL/P/12/F, figure 1). There is no evidence that the area proposed to be taken for the Chord is of especial value for nature conservation. Nor would the Scheme have any adverse impact on the wider LWS (including land to the east of Charbridge Lane), taking into account the proposed ecological enhancement and management of the replacement open space on the Exchange land.
- 8.11.24 Chiltern is pursuing with Cherwell District Council the matter of long-term management of the replacement open space and wildlife site. The Council has indicated that it would be prepared to accept responsibility for future maintenance, subject to the conclusion of appropriate financial arrangements with Chiltern.

Bats

- 8.11.25 Chiltern's *Wolvercot Tunnel Bat Mitigation Plan Version 2* is appended to document Obj/246/5. It describes, on pages 5 to 12, the mitigation measures proposed in respect of bats at the tunnel. Before the start of construction, 20 Schwegler bat boxes would be installed between 50 and 250 metres of either tunnel entrance, the temporary installation of one-way bat doors on nesting crevices, and the other measures described would be taken at the times stated. Surveys for bats (including roosting

bats) have been undertaken to cover all the key times of the year (spring, summer, autumn and winter) and the results have been taken into account in developing the Scheme, and discussed in detail with Natural England.

- 8.11.26 Document CRCL/INQ/61 is mentioned in Natural England's objection (6.55.73). It concludes that:
- a) Site investigations in the tunnel confirm that existing crevices used by bats can be retained. Chiltern would provide additional artificial crevice roost sites.
 - b) As much tunnel work as possible would be undertaken during the daytime to avoid harm to bats commuting through the tunnel. Bat boxes would be erected along the railway embankments to provide roosts for bats temporarily displaced during the daytime works.
 - c) Any works at night would avoid either dawn or dusk, and part of the night, to retain a level of bat movement throughout the tunnel.
 - d) Existing light levels around the tunnel entrances would be maintained of a distance of 25 metres from the entrances during construction works outside the tunnel.
 - e) Natural England has indicated that satisfactory mitigation is achievable for disturbance events during the construction works and so obtaining a licence is entirely possible.
 - f) The information which is available about pressure levels and air flow effects suggests that neither of those operational issues would significantly affect bats in the Wolvercote tunnel.
 - g) The risks of bats colliding with trains in the tunnel are low when all the factors that must coincide for such an event to occur are considered. Such a collision, if it occurred, would be simply an incident of the running of a train as it would be anywhere else in the country.
- 8.11.27 There is no published evidence in the UK of bats being killed by trains. No bat casualties have been found during site visits and surveys, although specific surveys for bat casualties have not been undertaken. Surveys in autumn 2009 found bats flying in front of the trains, suggesting that trains running at the present speeds (30 to 40 mph) are insufficient to prevent bats roosting in the tunnel. For reasons reported elsewhere (4.5.36), trains using the Scheme must travel at greater speeds than that.
- 8.11.28 For a collision to occur, the train must pass through the tunnel when bats are active, and in an area that puts them at risk. Between 0100 and 0500 there would be no trains passing through the tunnel, and hence no risk to bats. When trains are running, in Phase 1 there would be only four train movements per hour, and even when a passenger train does pass through the tunnel at approximately 70 mph it would take only about 12 seconds. So for most of the time, bats would still be able to commute and forage through the tunnel and access their roost sites without any additional disturbance.

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- 8.11.29 Chiltern has considered Natural England's suggestion that a reduction in the railway speed limit to 40 mph, between 2100 and 0100 from May to October, would provide appropriate mitigation for the bats. There is insufficient flexibility in the service timetable for such a limit. There is no mechanism for signing and enforcing variable speed limits on the railway. There are no variable speed limits on the UK rail network. Such an approach would not be acceptable to Network Rail.
- 8.11.30 Chiltern proposes a monitoring scheme for bats at the Wolvercot tunnel. This would include casualty searches, the use of anabats (acoustic detectors of bats) at each end of the Tunnel, and visual imaging. If the monitoring shows it to be necessary, Chiltern would implement an effective system of light deterrence in the Tunnel so that bats are not significantly harmed. The system is described in document CRCL/INQ/81. It would be switched on two minutes before the arrival of a train, illuminating lamps progressively from the centre of the Tunnel towards both entrances. Bats would move away from the lighting (as they are well known to do, as shown by bat behaviour at a floodlit lake in Lancashire in 1996), and out of the Tunnel or into dark crevices. The train would pass without endangering any bats. The lights would switch off immediately the train has left. The installation would operate only when the ambient temperature is not less than 2C, the lowest temperature at which bats are likely to be active; only between dusk and dawn; and only if the train speed exceeds 40 mph. The system would be kept in use for at least two years after Phase 1 services commence, and for a year after two or more casualties are recorded in a monitoring season. This is a positive response to the requirements of Regulation 50 of the Habitats Regulations 2010 (CD/5.30), which identifies the need for measures if any incidental kills are found to occur.
- 8.11.31 Chiltern holds that such arrangements do not fall within the ambit of the Protected Species licence, and so proposes that the arrangement be secured by planning condition, subject to Natural England agreement. Chiltern expects to apply for a licence to allow the construction works in the tunnel to be undertaken, as there would be a need for bats to be excluded from their roosts for a short period, contrary (without a licence) to Regulation 41(1)(d). Chiltern and Natural England have agreed temporary mitigation measures during the construction stage.
- 8.11.32 Chiltern does not agree that there is any licence requirement for the operation of trains. There is an extensive train network throughout the UK, including high speed trains, and none requires licences in the event that they might kill bats as they travel. Even if a bat was killed it would certainly not be done deliberately, which is the focus of Regulation 41. It is presumably not without good reason that the Habitats Regulations 2010 include, at Regulation 50, requirements for the monitoring of incidental capture and killing. Any bat casualties as a result of the operating train services, especially on existing train routes, are likely to be incidental.
- 8.11.33 Natural England have not identified where offence is forecluded by the grant of a licence by them for the operation of a train.
- 8.11.34 Regulation 53(9) requires that Natural England must not grant a licence unless they are satisfied (a) that there is no satisfactory alternative, and
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- (b) that the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.
- 8.11.35 Although the area close to the Tunnel comprises well-lit main roads which the more light-sensitive bats are unlikely to use if denied the Tunnel there are other commuting links from the railway corridor, both to the north and to the south of the Tunnel which provide alternatives for such bats. So, in the event that any bats are deterred temporarily from passing through the Tunnel, there are links into extensive areas of alternative foraging and commuting habitat in the wider surroundings. No long-term effect on bats is envisaged. The works would not be undertaken during the hibernation period, and so would not affect the bats' wintering range.
- 8.11.36 The natural range of the bats is the subject of document CRCL/INQ/73. In summary:
- a) The natural range of all the bat species recorded at Wolvercot Tunnel extends across extensive areas of the UK, and the conservation status of the range for all species is favourable except for Nathusius' Pipistrelle and Alcaethoe (where insufficient data are available for the assessment).
 - b) The population trends are increasing or stable for all but one of the bat species recorded. The exception is barbastelle bat, for which trends are unknown. The species has only been recorded occasionally at Wolvercot Tunnel.
 - c) The main bat species recorded at Wolvercot Tunnel are all common species locally in Oxfordshire.
 - d) There is evidence that much larger numbers of bats of similar species to those recorded at Wolvercot Tunnel occur in the surrounding area, including at other hibernacula.
 - e) Even with the Scheme in place, bats will be able to pass through Wolvercot Tunnel unaffected for the vast majority of the time.
- 8.11.37 The character of the works in the tunnel does not embrace deliberate capture, injury or killing of any protected wild animal. But it could be said that the works include disturbance of bats. Chiltern therefore proposes to seek a licence.
- 8.11.38 The character of the disturbance is not merely to preserve the existing cracks and crevices in the Tunnel but also to add to the roosting opportunities, by means of new crevices in the Tunnel and 20 permanent bat boxes outside. Bat exclusion tubes would also be fitted at the existing cracks and crevices for the duration of the works so as to encourage the bats, during that period, to be outside the Tunnel.
- 8.11.39 It is the use of those tubes which might be said to constitute a deliberate disturbance of bats, so that a licence is to be sought for the placement of such devices. A licence is only required for that which otherwise would be a criminal offence. A licence authorises a particular act. It is therefore the direct consequences of that act which may require consideration.

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- 8.11.40 It is highly improbable that a public body such as Natural England could do other than say there are overriding public interest considerations.
- 8.11.41 There is no satisfactory alternative because leaving the bats alone whilst the works are undertaken means they might be in the Tunnel when substantial works were being undertaken in circumstances when they could satisfactorily be elsewhere.
- 8.11.42 The authorised action would not be detrimental to the maintenance of the population of bats at a favourable status in their natural range as the placing of the devices would be beneficial to bats and, in any event, not merely would additional accommodation be provided but it is also clear that the natural range extends well beyond the tunnel with no effect on the favourable conservation status. It is quite impossible to say that the provision of bat doors during construction work would be detrimental to the maintenance of the population of the species at a favourable conservation status in their natural range; rather, the bat doors would be beneficial to bats in their natural range.
- 8.11.43 The position most recently expressed by Natural England does not bear analysis. Their error is a failure to consider what needs a licence. It is accepted by Natural England that no licence of any kind is required for the operational stage (6.55.74). If there is a concern that a bat might subsequently, if it chooses to fly in a railway tunnel, bump into a train then no licensable activity has occurred. All that has happened is that as an incident of everyday life there has been an accident involving a bat.
- 8.11.44 It is in fact not necessary for the Secretary of State to consider that there is no impediment to the grant of a licence. This appears from the recent decision of the Supreme Court in the case of *Morge*. The Court of Appeal, where judgement was not overturned, had earlier made it plain, in a passage that the reasoning of the Supreme Court did not disturb, that it was absurd to suppose a licence was required for the circumstance when a moving vehicle might come into contact with a bat (CRCL/INQ/80, paragraph 45 in the Court of Appeal and paragraph 29 in the Supreme Court).
- 8.11.45 The effect of the project on bats would comprise (i) exclusion of bats from their roost sites in the tunnel during construction, and (ii) disturbance effects from construction works.
- 8.11.46 A licence should be granted at the construction stage because:
- a) There is a regulatory purpose for it, as it would allow measures to be undertaken for bats which would otherwise be unlawful;
 - b) There are imperative reasons of overriding public interest – which are, in essence, coincident with the “very special circumstances” necessary to justify inappropriate development in the Green Belt (4.11.27);
 - c) There is no satisfactory alternative solution (8.11.13(a) and 8.11.41); and,
 - d) The favourable conservation status of bats in their natural range would not be affected by the proposed works (8.11.42).
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Newts

- 8.11.47 The Scheme's effects on great crested newts would not be significant, subject to Natural England's approval of the final Great Crested Newt Mitigation Report (CRCL/INQ/60, 4.15). No impediment to a licence is present.

8.12 Mansmoor Road and Work No. 13

- 8.12.1 Document CRCL/INQ/44/1 shows land ownerships, the Wendlebury Mead and Mansmoor Closes SSSI ("the SSSI" in section 8.12 of this report), the level crossings proposed to be closed, the proposed Work No. 13, and the proposed replacement barn. The proposed changes in this area are described elsewhere in this report (4.5.15).
- 8.12.2 Document CRCL/INQ/52 shows revised land acquisition proposals in the area. Plot 12002 and part of plot 11009, shown hatched red on the plan number "CH51 – Paul Miller barn location_rev2", would not be permanently needed for the Scheme. The Honour family (Obj 44, 45 and 46) would be granted rights of access to maintain access to the red hatched land.
- 8.12.3 Document CRCL/INQ/70 includes two drawings, showing access arrangements in the area as they are now and as they would be with the Scheme. The document explains how Chiltern would exercise the powers that the Order would establish so as to make the changes.
- 8.12.4 One effect of those changes would be that Mr P Miller would be able to use Work No. 13 as part of an alternative route between his severed land and the rest of his holding. The route would not be lengthy and, by virtue of the proposed relocation of his barn to the eastern side of the railway, the frequency of necessary crossings of the railway would be reduced.

Mansmoor Road

- 8.12.5 It is intended to use Mansmoor Road as a means of access for the construction of Work No. 13 and level crossing closures and occasionally, once the Scheme is complete, to gain access for the inspection and maintenance of the Work No. 13 bridge. Mansmoor Road would be repaired and upgraded as necessary prior to building Work No. 13 and would be made good as necessary once that work was complete. Chiltern does not intend to use Mansmoor Road for maintenance works to the railway once the Scheme is complete. Mansmoor Road would not be closed by Chiltern but the occasional need to bring large loads to the site might result in localised temporary disruption.
- 8.12.6 The proposals in respect of the Holts Farm bridge would not alter the way in which Mansmoor Road is used. No additional use of Mansmoor Road would occur as a result of the construction of the bridge.

Security at Holts Farm

- 8.12.7 The replacement bridleway would be at least 250 metres from Holts Farm house and buildings and so would not compromise security there. Mr and Mrs Honour would be able to gate and fence the land between as they wish to maintain security. There would be no direct public access to their property, which would be served by a private access from the

western end of Work No. 13.

- 8.12.8 The proposed Work No. 13 bridge would be over 300 metres from Holts Farm house, and about 7.5 metres high to top of parapet. Figure 7.6E of CD/1.17 shows a photomontage. The bridge would not result in a significant visual impact on Holts Farm house.

Options Considered For Work No. 13

- 8.12.9 Chiltern carried out early evaluation of a number of alternative routes. The alternative suggested by Mr and Mrs Honour (6.55.46) was among those. It would require a hardened access road around the boundary of the SSSI, which was opposed by Natural England. Mr and Mrs Honour had explained that an access solely from the A34/M40 junction would be unacceptable to them. The options that were examined before the Order application was submitted are set out in the *Level Crossing Replacement Options Report – Manor Farm, Home Farm, BEEBONT, Holts Farm: 24 May 2010* (CD/2.16). Correspondence between Chiltern and Mr and Mrs Honour is appended to document CRCL/R/OBJ185. Their agent's letter dated 3 November 2009 records that they agreed, with minor caveats, to the bridge and access set out in the Order Scheme.
- 8.12.10 Of the options proposed by objectors:
- a) Option 10 is the Landowner's Alternative described and assessed in paragraph 8.12.11 of this report.
 - b) Option 11 would require the construction of two bridges and does not provide any solution for the diversion of the bridleway. It is not provided for in the draft Order and would require planning and other consents. It would be more costly to build and to maintain. It would need the agreement of a third-party landowner.
 - c) Option 12 has much in common with the Scheme proposal but would include an additional length of concrete track adjacent to or through the SSSI.
 - d) Option 13 has been considered by Chiltern. It does not meet the objectives of closing all level crossings, creating satisfactory access to agricultural land severed by those closures, and providing a satisfactory diversion of bridleway BW157/4.
- 8.12.11 The Landowner's Alternative is a variant of Option 13. It was first promoted in Spring 2010 and examined at a site visit in June 2010, and was evaluated by Chiltern as reported in Appendix 20 of CRCL/P/12/B:
- a) The Landowners' Alternative would originate at Merton Road. The road would be aligned parallel to the motorway, adjacent to the boundary fence. It would cross two watercourses and then climb a newly-built embankment to reach a new railway overbridge, at the present location of Wendlebury Foot crossing. After crossing the railway the road would turn south through 90 degrees and meet the existing access road between Mr Miller's existing barn (to the north-west of the railway) and the Wendlebury/Weston road. One of the watercourse bridges would encroach on the SSSI by approximately 330 square

metres.

- b) The evaluation concludes that the Landowners' Alternative has significant disadvantages when compared to the Scheme proposal. It would involve significant encroachment on the SSSI, extensive works in Flood Zones 2 and 3, and create an unsatisfactory diversion for bridleway BW157/4. It would incur a cost penalty of the order of £2.2 million over the Scheme, without significant benefits.

8.13 Langford Lane and Work No. 11

- 8.13.1 Proponents of the Orange Route live in the area where newsletters about the Scheme were distributed. Public exhibitions have been held, one in Bicester and various channels arranged for the public to contact Chiltern's consultation team. All this is in addition to the statutory requirements, with which Chiltern fully complied.

- 8.13.2 Notwithstanding English Heritage's views on the Orange Route, English Heritage has removed its objection to the Order Scheme as modified.

Potential Effect On The Flood Plain

- 8.13.3 The latest hydrological and flood risk assessment reports are in CD/2.22, which includes additional information about flood risk in the Langford Lane area. Chiltern has examined the Flood Map data along the proposed route relative to ground height data of the highest vertical accuracy now available and has found inaccuracies in the Flood Zone boundaries, with some relevant parts of the Scheme proposal lying above the level of the 1:100 year flood. The eastern sections of the Scheme proposal would not need compensatory flood storage.

- 8.13.4 Based on current Flood Zone 3 data, the footprint of the Orange Route's eastern section is likely to be greater than that of the Scheme proposal.

- 8.13.5 Based on assessments conducted in accordance with PPS25 and the latest Environment Agency Flood Map data, the Orange Route is likely to have a greater footprint within Flood Zone 3 and have a larger area of hardstanding. It is likely to introduce the potential for adverse impacts to the quality and integrity of Langford Brook due to its proximity to the watercourse. Therefore, the Order Scheme is to be preferred in flood risk terms.

- 8.13.6 With reference to the objection of Wendlebury Parish Council regarding flooding (6.44.4), Chiltern will undertake a detailed (Level 3) Flood Risk Assessment at the appropriate time in the Scheme design. This would include hydrological modelling to further define flood risk and would inform the nature of any further detailed design stage mitigation to ensure that the works do not increase the risk of flooding to local residents.

Access Changes

- 8.13.7 Langford Lane is a public road where it is east of Bramlow but, south of Bramlow, Langford Lane is a bridleway (BR295/4) from Bramlow past Merton Grounds Farm and the Topbreed and Primepark land to Merton Road. The bridleway section is also a private means of access to those properties. As the private section of Langford Lane is currently the only

vehicular access to Merton Grounds Farm and the surrounding land, the proposed Langford Lane diversion does not change the existing circumstances. However, the Scheme diversion would divert traffic accessing Merton Grounds Farm from passing Bramlow.

- 8.13.8 Chiltern's assessment of the likely origins and destinations of vehicular traffic using Langford Lane crossing is set out in CRCL/INQ/33. No origins or destinations or trip purposes were collected when flows at the level crossing were counted, but it is possible to make reasonable estimates based on geography and the evidence of individual objectors. Up to 80% of all vehicle trips across the Langford Lane crossing are likely to start or finish at Wendlebury Gate Stables, and 84% of all trips start or finish in the properties accessed directly by the public road section of Langford Lane. All of the residents, businesses and their customers, east of Langford Lane, with the exception of Alchester House, would suffer the same inconvenience from the Chiltern proposals for the diversion of Langford Lane.
- 8.13.9 Both the modified Scheme proposal and the Orange route would change travel distances between the area served by Langford Lane (Wendlebury Gate and Merton Grounds) and other locations (M40 Junction 9 to the south, or Bicester to the north). The inbound and outbound distances differ because of existing traffic management measures in the area, which would be retained in either case. The effects on vehicle trips to or from Merton Grounds and to or from Wendlebury Gate are as follows:

Changes In Travel Distances Relative To Current		
Journey	Change in distance: Chiltern modified scheme	Change in distance: Orange Route
Merton Grounds to Bicester	+ 2.49 km	+ 1.78 km
Bicester to Merton Grounds	+ 1.96 km	+ 1.25 km
Merton Grounds to M40J9	+ 0.69 km	- 0.07 km
M40J9 to Merton Grounds	+ 2.50 km	+ 1.79 km
Wendlebury Gate to Bicester	+ 2.52 km	+ 2.92 km
Bicester to Wendlebury Gate	+ 2.05 km	+ 2.49 km
Wendlebury Gate to M40J9	+ 0.66 km	+ 1.06 km
M40J9 to Wendlebury Gate	+ 2.49 km	+ 2.95 km

- 8.13.10 Increased journey lengths would be undesirable for users but the additional journey lengths associated with the Scheme proposal, as proposed to be modified, would not represent significant inconvenience to users.
- 8.13.11 The Deeley and Calcutt Trustees farm land to the east of Langford Lane as part of a larger farming unit accessed directly from Merton Road (which is to the south) via the existing bridleway BW 295/4, and so would not be affected by the Work No. 11 proposal which would affect access from the north and west.

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- 8.13.12 Traffic that used the Orange Route to get to Wendlebury Gate would pass almost as close to Alchester House as it would if using the Scheme proposal for Work No. 11.
- 8.13.13 Bridleway users travelling between Wendlebury village and the junction of Langford Lane and Merton Road would travel 4.89 kilometres with the modified Chiltern proposal, or 4.03 kilometres with the Orange Route. Those who wished to travel north, rather than to Wendlebury village, would travel 5.91 kilometres with the modified Chiltern proposal or 5.05 kilometres with the Orange Route. The corresponding distances now are 4.49 km to Wendlebury, and 3.40 km to the north. No equestrian users of the Langford Lane crossing were recorded in the survey on 14 June 2009, and only 12 were recorded in June 2010 over a four day survey, including the weekend when use would be expected to be at its highest.
- 8.13.14 If walkers chose to use the diverted Langford Lane, both the modified Scheme proposal and the Orange Route would increase their travel distance by 0.67 kilometres. Any such walkers would be more likely to divert onto the existing footway network, using FP 295/3 to the east of the railway and FP 398/6 to the west. The June 2010 survey recorded only 14 pedestrians here over a 4-day period, fewer than 4 per day. The Scheme would give rise to no increase in security risk to properties in the Merton Grounds area.
- 8.13.15 The Scheme would be unlikely to encourage a change in route choice for people travelling to or from the south that would make the route through Wendlebury more attractive than it is now, and so it would be unlikely to alter traffic conditions in Wendlebury.

Other Considerations

- 8.13.16 Construction of the Scheme proposal would not present any undue engineering difficulties. The route balances a number of conflicting factors including effects on the Alchester Roman Town scheduled monument, flood considerations and the additional length of the diversionary route. There would be no merit in acquiring Topbreed's existing private access road for £1.00 so that it could grant access rights to Topbreed so that Topbreed could continue to access its property.
- 8.13.17 The new junction (of the new Work No. 11 access road and existing Langford Lane) would be a safe and suitable form of access constructed to adoptable standards. It would be designed to accommodate all types of vehicle that reasonably require access to the properties. The indicative design has been approved by Oxfordshire County Council as local highway authority.
- 8.13.18 No Environmental Statement has been prepared for the Orange Route, nor has it been established whether one is necessary. A separate planning permission would be needed for the Orange Route, as it does not form part of the Order Scheme.
- 8.13.19 The Scheme is the subject of an application for deemed planning permission which, if granted, would negate the need for consent under the 1997 Hedgerow Regulations.
- 8.13.20 Neither the Orange Route nor the Work No. 11 proposal would have a significant noise effect on Alchester House.
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8.14 **Other Crossings – Footpaths, Bridleways and Private Accesses**

Gosford and Water Eaton Number 4 (FP 229/4)

8.14.1 When developing this footpath diversion proposal, Chiltern consulted the 30 organisations listed in Annex B of the public rights of way report (CD/1.11). The diversion along the A34 and A4165, now part of the Scheme proposal, was favoured by the majority of consultees, including Oxfordshire Country Council. The advantages of this diversion were seen to be that it would give better and more direct access to Water Eaton Parkway Station, especially from Kidlington, while the proposed diversion of bridleway BR 229/5 would maintain a rural and quiet recreational route in this part of the public rights of way network, with safe access over the A34.

8.14.2 This public right of way is not a bridleway and there are no rights for its use by cyclists.

Oddington Foot Number 6 (FP 318/6) and the “BEEBONT” crossing (BW157/4)

8.14.3 Chiltern seeks public right of way diversions through section 5(6) of the Transport and Works Act 1992. This requires Chiltern to satisfy the Secretary of State that either:

- “a) an alternative right of way has been or will be provided; or
- b) the provision of an alternative right of way is not required.”

8.14.4 Of these, the Scheme proposal would meet requirement a).

8.14.5 This is a recreational footpath. The Scheme proposal would introduce a section of footpath 0.9 kilometres long, alongside the railway. This would be one-fifth of the total length of the footpath, with the diversion, between Charlton-on-Otmoor and Weston-on-the-Green. In view of the expected train frequency and the likely walking speed along this section of path, it is likely that walkers may experience two trains passing while walking along this section of the footpath. The level of use was found in June 2009 to be nil during a 3-hour period at a weekend when levels of recreational use should be high, and nil during a survey conducted on four days (Friday to Monday, 0900 to 1300 and 1400 to 1800) in June 2010. The reality is that changes to the footpath will not affect many people.

8.14.6 Network Rail requires access to all structures over the railway for maintenance. The access must have a surface suitable for all normal road vehicles throughout the year. The shortest such access that could be provided, if a bridge was built at this crossing, would be from Mansmoor Road and that access would be 0.9 kilometres long (to minimise agricultural land take).

8.14.7 The construction of a bridge and considerable length of access is not justified on the grounds of the low level of use of the footpath. A reasonably convenient alternative would be provided. If the tests of s119A of the Highways Act 1980, and Circular 1/09 *Rights of Way* (CD/5.29) were applied, they would be met.

8.14.8 Historic rights of way, unless explicitly covered by another designation, are not included in the definition of a designated heritage asset in Annex

2 of Planning Policy Statement 5 *Planning for the Historic Environment* ("PPS5", CD/3.3). Policy HE9.6 of PPS5 states that many heritage assets that are not currently designated as scheduled monuments "but which are demonstrably of equivalent significance" should be subject to the protection afforded by Policy HE9.1. The Oxford Fieldpaths Society does not present any evidence to show that Footpath FP318/6, or the Beebont bridleway (BW157/4), are demonstrably of equivalent significance to scheduled monuments. The diversion of the two rights of way would not result in any physical works and the character of the historic landscape would be preserved. The alignment of FP318/6 on the approaches to Oddington Foot Number 6 level crossing are not discernible on the ground. The Environmental Statement considers the effects of the Scheme on the Otmoor Lowlands landscape character area and components of the historic landscape that give it its character, and finds that the magnitude of the change in the landscape would be small, and the impacts not significant. Walkers would still be able to enjoy the historical quality of this part of the landscape and would be able to enjoy views of the Otmoor landscape from the new bridge at Holts Farm. There would be little or no impact on the medieval field system.

8.14.9 The diversion of FP318/6 and that of BW157/4 would not affect the overall integrity of the public rights of way network, or its potential contribution to the sustainable tourism offer of Cherwell District. Neither Cherwell District Council nor Oxfordshire County Council raise any objection to the proposed public rights of way diversions.

8.14.10 The draft Order does not include the powers to deliver the footpath link suggested by Bus Users UK's Oxford Group (6.45.3 (d)) and it was not an option that was raised by Oxfordshire County Council in discussion with Chiltern.

Work No. 9: Tubbs Lane Crossing (FP 129/3)

8.14.11 A new Disability Discrimination Act compliant bridge is proposed in the location of the current crossing. A possible design for the bridge is shown in drawing E094/83 (Annex H of CD/1.19.1, the revised Design and Access Statement January 2011). The bridge would have a steel ramp and stepped structure on steel pillars. It would link into the existing network of footpaths, and it would be lit. Figure 3.12 of CD/1.19.1 shows how it might look. The bridge would provide a safe crossing for the large numbers of users in the area, including those pushing prams or bicycles and the mobility impaired.

8.14.12 Chiltern examined in some detail the possibility of providing a subway here, rather than a bridge. But it would suffer from flooding and a perceived lack of security. The limited space on the Launton Road (north-western) side would result in an overly-steep access ramp that would be narrow and curved, and that would limit forward visibility for those using the subway. Maintenance access to the adjacent electricity substation would be difficult to accommodate, public open space land would be needed and an awkward area of inaccessible land would be created.

8.14.13 Wheeling ramps would not be provided on the bridge steps here or elsewhere, as such ramps can create water traps and cause maintenance

problems. However, all the bridleway bridges would have ramped access, as would the footbridge at Tubbs Lane.

Work No. 8 (Footpath FP129/3)

- 8.14.14 A footbridge is proposed. A new subway would not be appropriate. The level of the footway in such a subway would be beneath that of the local water table, and the subway would thus require pumped drainage, at a significantly higher on-going maintenance cost than that of a bridge. Subways present a perceived risk to personal security and so design guidance issued by the Highways Agency advises against their use in "urban and peri-urban areas" such as this.
- 8.14.15 Footpath FP129/3 passes under the London to Birmingham main line and through its embankment. That subway, shown by photograph in Appendix B of CRCL/R/Obj12, constrains access by, for example, the maintenance machinery needed for open space management such as Paul and Denise West mention (6.42.3). The existing subway, and the constraint it imposes, would remain even if a subway could be provided in place of Work No. 8. Furthermore, the footpath that approaches the site of Work No. 8 is not made up, and unsuitable for use by the range of users suggested by the objectors. As a footway, it should not be used by cyclists.
- 8.14.16 Objectors refer to the 1987 *South East Bicester Development Brief*, the 1988 *Bicester Local Plan* and other documents, but none of those documents forms part of the statutory framework or the evidence base for the Local Development Framework. The relevant local plan is the adopted Cherwell Local Plan 1996 (CRCL/INQ/40). The land owned by Paul and Denise West has since been identified in the Cherwell District Council Green Spaces Strategy Background Document (July 2008) as "natural to semi-natural open space" but, unless that was taken forward into an LDF site allocations document, it has no planning status.

Brookfurlong Crossing and nearby crossings

- 8.14.17 The current track to the south-east of the railway at Brookfurlong is used throughout its length by Mr Unwin (6.55.55) and Mr J Henman.
- 8.14.18 Chiltern has consulted Mr Unwin on the condition of the current access track to Brookfurlong Farm and the new surface proposed for the suggested alternative. A form of agreement has been sent to Mr Unwin, setting out Chiltern's proposals for improvements to the alternative access that would be shared with existing users, and the mechanism by which Chiltern proposes to put in place a maintenance cost sharing regime to assist with neighbourly relations. Mr Unwin disputes the adequacy of the concrete track proposed by Chiltern but has not proposed an alternative or explained why the proposed specification is considered inadequate. Mr Unwin also seeks the payment by Chiltern of his legal costs, to a degree Chiltern considers unreasonable.
- 8.14.19 The proposed closure of Islip No. 4 crossing (FP 260/4) would necessitate a diversion along the existing Oxfordshire Way (FP 318/5) of less than 400 metres. A new footpath would be created to reduce the length of the diversion. The arrangement was devised in consultation with Oxfordshire County Council. It is an acceptable alternative for a

primarily recreational route which retains the overall integrity of the footpath network in this area.

Mill Farm Crossing

- 8.14.20 An alternative access already exists between the land on either side of the railway. Mill Farm crossing is rarely used. The alternative access between the land in common ownership is already in use. Closure of Mill Farm crossing appears to be already accepted as a reasonable alternative to using this accommodation level crossing.

Nesbitt's Crossing

- 8.14.21 This crossing originally provided access between agricultural land in the same ownership. While the land remains in common ownership, the use on either side of the railway is no longer the same. Each parcel of land has independent access. The crossing is not in use. There is no case for the retention of this crossing and it should be closed.

College Farm No.2 Crossing, Farm Crossing, Bonners Crossing

- 8.14.22 The proposed closures of these accommodation crossings are the subject of the objection of Mr T Howard (6.55.61).
- 8.14.23 When developing the Scheme, Chiltern were aware that Mr Howard intended to sell his farm. It was marketed in two lots. Chiltern consulted Mr Howard then, and it was apparent that he was trying to dispose of his land in two lots independent of the accommodation crossing. Currently Mr Howard does not farm the whole farm as one unit. For some time he has operated the western lot as a riding school and for chicken farming, and the eastern lot has been used to grow grass.
- 8.14.24 Mr Howard raises other matters. Trains using the line now sometimes sound their horns. The Scheme would increase the number of trains but reduce the opportunities for maintenance works while trains are running. It is unlikely that there would be a noticeable increase in the sounding of train horns and there might even be a reduction. In the event that losses are incurred and justified by Mr Howard, then Chiltern is satisfied that the provisions of the compensation code would mitigate those effects.
- 8.14.25 The alternative means of access to Work No. 12 (and the level crossings in the subheading above) proposed by the Deeley and Calcutt Trustees (6.32.10) is only marginally shorter than the route proposed in the Scheme. It also crosses a number of watercourses (albeit watercourses that are much smaller than those crossed by the Scheme).

8.15 Trains and Horses

- 8.15.1 Section 6.5.3 of the Environmental Statement (CD/1.16) says:

There is no firm guidance on this issue on which to develop mitigation. However, the guidance from the International League for the Protection of Horses on previous rail projects suggests that horses can adapt to the noise and commotion of railway lines being built near to where they are kept over a period of time. CRCL will continue dialogue with potentially affected equestrian centres to ensure that the works and operation of the line does not lead to any safety issues and that disturbance to horses is

minimised through the Code of Construction Practice and operational noise control procedures.

Horses As Flight Animals

- 8.15.2 Under some circumstances horses may take flight, as suggested by the ILPH in their letter dated 7 March 2007 (Document 4, Obj/238 statement of case), and safety problems may arise if horses have little space to move away from the line. That would not be the case at Wendlebury Gate Stables where the fields are laid out so that a horse could stand some 140 metres from the railway.
- 8.15.3 Horses might take flight at level crossings, such as that in Leicestershire to which Messrs Offord and Bradshaw refer. But the level crossing at Langford Lane would be closed, and that would remove this source of risk. Also, horses in the field would be much further from the tracks than are horses at the level crossing, and not subject to the unnatural surroundings of a level crossing.
- 8.15.4 None of the national riding magazines, or complaints forums operated by the British Horse Society and others, have any reports of incidents that have occurred as a result of trains passing horses in a field either grazing or riding. Chiltern is not required to provide a risk assessment of the operation of third-party businesses, but has provided all the documentation required to assess the effects of the Scheme that are required under the Transport and Works Act.
- 8.15.5 There would not be an impact on Mr Howard's livery business, and he has not demonstrated any potential adverse effect on horses using his land which would arise from the Scheme. Should any such losses demonstrably arise they would be a matter for the Compensation Code.

Noise, Rider Instruction and Safety

- 8.15.6 Chiltern does not disagree with the findings of the 24 Acoustics Report (Obj/238 Statement of Case, Document 8). Measured noise levels at Kings Sutton and use of BS EN ISO 9921:2003 *Ergonomics – Assessment of Speech Communication* (CRCL/INQ37) confirms that speech interference (between instructor and rider) would occur if the instructor was 30 metres from the rider while a train passed. However, the Standard also suggests that the ambient noise at the Stables (approximately 41 dB(A) with no trains) would also allow audibility conditions to reach the lower end of "poor". In this worst case, many other noise sources could make communication difficult at such a distance.
- 8.15.7 Nor does Chiltern contest that a long train (of 28 to 30 vehicles) could generate noise that could interfere with speech for about 25 seconds (allowing for noise rise and decay times). Passing freight trains are often shorter than this, which would reduce the effect on the noise climate at the stables.
- 8.15.8 However, at distances closer to the horse, communications with an inexperienced rider could be maintained when a train passes by. The standard suggests that the distance to achieve this may need to be about 5 metres, but this seems conservative based on the subjective experience obtained on a visit to Kings Sutton railway line by Chiltern

and representatives of Messrs Offord and Bradshaw. That site was chosen because it is a true representation of conditions at Wendlebury Gate Stables if the Scheme goes ahead. An officer of Cherwell District Council, the licensing authority, was also present. Noise recordings were taken and it was found on this site visit that the noise that could be experienced at the distance (from the railway) of the riding school would not be excessive. A horse in an enclosure some 75 metres from the track did not react to any of the trains that passed. The licensing representative was not concerned about the noise impact at the riding school arenas and felt that, even close to the railway, the level of risk of a horse spooking was so low that an application might contain credible risk management measures: but he could only make a formal assessment once an application had been submitted.

- 8.15.9 The legal advice obtained by Messrs Offord and Bradshaw (6.36.21) does not provide evidence to support the opinions it expresses. It suggests that the business should follow its legal duties, and that there would be an increase in the need for risk assessments. A risk assessment would necessarily include consideration of the mitigation that could be applied in the unlikely event that an issue should arise. It is not suggested that further mitigation should not be considered to reduce the risk. When the railway is operational, if it was not possible to find a way of mitigating the risk to an acceptable level, then it may be possible for compensation to be considered. The closest construction activity to the stables would probably be relatively short-term.
- 8.15.10 The evidence of Mr Peace is that horses may become agitated when exposed to sudden noise. But noise from the railway would not be sudden, but would build up over several seconds as the train approached. And horses could move away from the track.
- 8.15.11 As to mitigation at Wendlebury Gate Stables:
- a) A noise fence in the railway corridor, while outside the boundary of the Alchester Roman Town Scheduled Monument, would inevitably have the potential to disturb buried archaeology and installation would need to be preceded by detailed and costly archaeological investigation. The need for a fence is not proven, and therefore the likely disturbance of buried archaeology could not be justified. The cost estimate provided by Messrs Offord and Bradshaw does not take into account such factors, or other site-specific factors.
 - b) Since the effects of the Scheme have not been shown to be unacceptable, and since any increase in risks cannot be mitigated through field management or other measures, the cost of building a covered riding area could not be justified on technical grounds.
- 8.15.12 Document CRCL/INQ/53 identifies existing riding stables that operate close to railway lines. Nine sites were first identified, of which five are described in the document. The descriptions include, for each: the name, address and telephone number, the approximate distance to the railway, the approximate train speed, the types of trains, and the name of nearby stations. Cathiron Farm Livery Stables are between 10 metres

and 100 metres from a railway used by all types of train travelling at up to 125 mph, and the Alder Root Riding Centre is between 0 and 20 metres of the West Coast Main Line, where trains pass at 80 mph.

- 8.15.13 Given that there are a number of riding stables operating close to railway lines, any increase in potential risk may be mitigated through carefully considering the measures that are put in place to manage this potential risk. There would not be a significant effect on the businesses at the Wendlebury Gate Stables. In any event, if there were demonstrable losses they would be assessed and compensated in accordance with the Compensation Code.

8.16 **Land at London Road, Bicester, and Land at Langford Park Farm**

- 8.16.1 The objections of Mr Basson and Leda Properties relate to these sites (6.52.1).

- 8.16.2 Of the area of land shown in Leda's illustrative master plan for the London Road site, the only acquisition would be temporary acquisition of parcel 04037. This is a small strip of land at the northern boundary of the development site, which the current development master plan shows as a landscaped area. It would be used to provide access by road vehicles to a proposed construction compound on parcel 04039. That construction compound would provide a base for widening the A41 overbridge, as part of the Phase 2B works, to accommodate a third track to provide revised rail access to the MoD site. The access would be needed since most plant and materials for the bridge works would travel to or from the site by road.

- 8.16.3 The Masterplan for the Leda development is still being developed and there remains the opportunity to accommodate the temporary works for the Scheme in the overall design and phasing without compromising the nature or scale of development, and hence the implementation of any outline permission for up to 140 houses that may be granted. In any event, the loss of three housing units that Leda claims would result from the temporary access track that the Scheme proposes would not affect Cherwell District Council's ability to meet its housing needs targets over the Plan period.

- 8.16.4 The additional hard surface required for the temporary access track would be small and would not require any additional flood risk assessment.

- 8.16.5 The Alternative access proposed by Leda would require temporary powers over land outside the Order Scheme and is, therefore, not deliverable. The extent of parcel 04037 was drawn widely here to give flexibility in designing the access track, given the physical constraints in the area, and the actual land take might be much smaller. The alternative access would appear, on the face of it, to provide a workable alternative but it is unsatisfactory because:

- a) It falls outside the Order Scheme limits and does not promote significant improvements to the Scheme such that it could be promoted as "very exceptional circumstances".
- b) It would require the removal of a large mature tree; and,
- c) It significantly encroaches on a cycle track which is understood

to be publicly adopted.

- 8.16.6 The application for development of the site at London Road is linked to an application for flood compensation works on land at Langford Park Farm (ref. 10/01316/F). Although Leda Property Limited's evidence to the Inquiry was that it is prepared to enter an agreement with Chiltern so that Chiltern may gain access for the purposes specified in the Order, that has not been confirmed to Chiltern following its offer to enter such an agreement.
- 8.16.7 Chiltern does not propose any physical works to the access track to Langford Park Farm. The Scheme would not prevent the implementation of planning permission for application 10/01316/F, if granted, as access would be retained as part of the Order, and as the access track is outside the area identified within the planning application boundary for flood compensation. In any event, plots 04a003, 04a004 and 05017 comprise a track over which the MoD and a farm have existing rights of way which have to be accommodated by Leda come what may. Access would also have to be provided for emergency vehicles along the track at all times. The additional use of the track for maintenance access to the railway could not materially prejudice Leda's ability to develop its land. Nor would it be in Chiltern's interest to inhibit the implementation of Leda's flood relief scheme since to do so could raise the level of compensation.
- 8.16.8 Both strands of the objections of Mr Basson and Leda Properties Limited reduce to questions of compensation.

8.17 **Land At Gavray Drive, Bicester**

Status Of The Green Land To Be Acquired

- 8.17.1 Chiltern does not rely on any matter of "abandonment" of the Green Land. Chiltern disputes the claim that the land was actively farmed until six months before the Inquiry and, in CRCL/INQ/39, provides photographs of the site taken in 2003 and 2009 which show that the land north of Gavray Drive has been maintained and mown from time to time and that there is no evidence of recent active farm management or cultivation.
- 8.17.2 The matter of whether the land to be acquired is "de facto" open space rests on the second part of the definition under section 19(4) of the Acquisition of Land Act 1981 (CD/5.6) that it is "used for the purposes of public recreation". Recent photographs of the site (Appendix 10 of CRCL/P/12B) clearly show informal public use of the site. Although the land is privately owned, it can be accessed from a public footpath (FP 129/3) that crosses the site, and at other points along the boundary (which is not secure). Based on this evidence, Chiltern has defined the land as "de facto" open space. Taking the typology of open space in Planning Policy Guidance 17: *Planning For Open Space, Sport And Recreation* the land can be categorised as a "natural and semi-natural urban green space" including grassland and meadows.

Recreational Enjoyment Of The Land To Be Acquired

- 8.17.3 In providing replacement open space or "exchange land", Chiltern would ensure that current levels of open space provision would be maintained and that local residents would have the same level of access to formal

and informal recreational activities in the local area.

Suitability Of Exchange Land

- 8.17.4 The Landscape and Ecology Enhancement Strategy (4.11.40), when implemented, would make the exchange land accessible to the public that would have "*hitherto benefited from the Order land and, more generally, the public at large*", as required by paragraph 26 of Circular 6/2004 *Compulsory Purchase and the Criche Down Rules* (CD/5.19).

Equality of Access

- 8.17.5 It is not clear how the distances quoted for Mrs Walker (6.38.14, 6.38.16) were established. The Open Space Plan shows the form and location of the land. As the crow flies the furthest point of the land to be acquired is 950 metres from the exchange land and the closest, 250 metres. The following table sets out Chiltern's assessment of some illustrative walking distances as shown in Appendix B of document CRCL/R/Obj7/1:

Walking Distances from Dwellings South of Gavray Drive			
Location	Distance to Green Land (km)	Distance to Blue Land (km)	Net Difference (km)
Mallards Way	0.30	1.29	+0.99
Heron Drive	0.59	1.04	+0.45
Merganser Drive	0.57	0.61	+0.04

- 8.17.6 Whilst people living at the far western end of Gavray Drive would have an additional kilometre to walk, those at the eastern end would have a similar walking distance to the exchange land as they currently have to the open space to be acquired. And the alternative areas of open space that, for most local residents, are closer – with associated shorter walking distances – than the exchange land, means that even those who are furthest from the exchange land would not be disadvantaged by the Scheme. Residents would not be forced to choose between the exchange land and the other alternatives, since the alternatives would still be available to them.
- 8.17.7 A4421 Charbridge Lane is part of the Bicester "ring road" and primarily a traffic route. There is a footway along its western side to the point where people would cross to reach the exchange land. This stretch of Charbridge Lane is straight with good visibility and is relatively safe. It is not identified in the draft Bicester Transport and Land Use Study 2 report (February 2009) as having high accident frequencies. Therefore, a footbridge or underpass would not be necessary at the crossing.

Temporary Acquisition of Open Space

- 8.17.8 Section 19 of the Acquisition of Land Act 1981 relates only to the permanent acquisition of open space, and the tests do not relate to areas of open space that are affected only temporarily.

Alternative Exchange Land Considered And Rejected

- 8.17.9 Among the alternatives considered by Chiltern for exchange land is a body of land to the north of the London-Birmingham railway (Obj7/4, appendix 7). That land is not suitable to be offered as exchange land because it is identified by the Proposals Map of the Non-Statutory Cherwell Local Plan 2011 as being potential open space under policies R1 and R3 and, in the Cherwell District Council Green Spaces Strategy Background Document (July 2008) as natural to semi-natural open space. Photographic evidence in Appendix C of document CRCL/R/Obj7/3 shows informal paths and recreational use of the site as open space. As both Chiltern and the local authority consider the alternative site to already be open space, it cannot qualify as suitable exchange land.

Extent of the Green Land

- 8.17.10 The Green Land is more extensive than was envisaged in 2006. At that time the outline engineering design of the Bicester to Oxford Railway had not been undertaken. More detailed railway design work undertaken in 2009 revealed the need for the Green Land. Subsequently, through detailed design work and discussions with the Norman Trust, London and Metropolitan International Developments Limited and Gallagher Estates ("the Landowners" in this paragraph), Chiltern has established that the Scheme's need for permanent land take to the north of Gavray Drive is less than allowed by the Order. Appendix E of CRCL/R/Obj192,249 & 257 is an undertaking sent by Chiltern to the Landowners whereby Chiltern would undertake not to exercise the powers of permanent acquisition conferred by the Order over the land edged blue on the plan in that Appendix E. The completed undertaking was not before the Inquiry.
- 8.17.11 Engineering measures to further reduce the land take north of Gavray Drive have been explored. These have included options that incorporate retaining walls but those were rejected because of the high construction cost, high ongoing inspection and maintenance cost and significant adverse appearance compared with the earth slope proposed in the Order scheme.

8.18 Effects During Construction

Wolvercot Tunnel

- 8.18.1 At the time of writing the Environmental Statement, Chiltern had intended to close the ends of Wolvercot Tunnel during the construction period. It is now clear that this should not be done, due to the need to keep the tunnel open for bats. Further mitigation would be needed, which would be set out in consents issued (and subsequently enforceable) by the local authority on Chiltern's application under section 61 of the Control of Pollution Act 1974. The draft Code of Construction Practice (CD/1.24) sets out in its section 6.1 noise limits for daytime working and describes a regime for the control of noise from night work. However, it may be that night work can be avoided through appropriate detailed design.
- 8.18.2 Among other measures, the Code of Construction Practice as currently

drafted would require the appointment of a liaison officer to communicate with the relevant authorities and with the public on all matters relating to the construction works. A complaints hot line would be maintained. The public would be notified of works well in advance.

- 8.18.3 Section 4.3 of the Code of Construction Practice Revision Two Draft (CD/1.24) identifies the measures that would be used to minimise the effects of lighting on nearby residents.
- 8.18.4 Chiltern's contractor would employ Best Practicable Means to reduce construction noise and this would include minimising unnecessary noise from conversation on site.
- 8.18.5 Generators would necessarily be used in connection with the tunnel works. As with any such works close to dwellings, the generators would be silenced and located to minimise any residual noise.
- 8.18.6 Section 4.10 of the Code of Construction Practice Revision Two Draft provides for the protection of buildings and installations near the works. In summary, properties that may be at risk of ground movement or vibration arising from the construction of the works would be, with their owner's agreement, surveyed and a schedule of defects prepared. Then, up to two years after opening of the railway and upon reasonable evidence of damage, a second defects survey would be carried out and those defects attributable to the works will be remedied.

Mr K A Hayward

- 8.18.7 The worksite would be segregated from the remaining land by a means of enclosure suitable for the situation, such as a fence or hoarding. When the works are complete the land would be reinstated in accordance with the Code of Construction Practice Revision Two Draft and the relevant proposed planning condition. Mr Hayward would be able to claim compensation in accordance with the Compensation Code established by the Order.

Mill Street, Islip

- 8.18.8 Restrictions and methods of control to regulate construction traffic are detailed in the revised draft Code of Construction Practice. These will ensure access is maintained to individual residential properties during the construction period, for example by use of the Mill Lane crossing (6.27.2).

SS Philip and James' School

- 8.18.9 The access to the railway from Aristotle Lane (6.55.88) would not be used for the construction of the main railway works. Those works would be accessed via the railway corridor from the main construction compound at Water Eaton. A limited amount of Scheme-related traffic might use Aristotle Lane – for example, to bring surveyors to the site during the detailed design of the works, or to carry plant or materials for the proposed works to Aristotle Lane bridge and the level crossing. The number of vehicles involved would be low and Chiltern would seek to avoid vehicle movements at the start or end of the school day.

- 8.19 **Development Proposals At Water Eaton
Station**

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- 8.19.1 A parkway station to the north of Oxford would allow rail to access new markets. The operational requirements are that the new station should be:
- Directly adjacent to the railway line to the north of Oxford;
 - Able to optimise existing infrastructure, such as cycle routes, bus-based park and ride and the like;
 - Easily accessible from major arterial roads;
 - Close enough to radial routes into Oxford to encourage use by people who currently drive into Oxford or other stations to access the rail network;
 - Able to accommodate up to around 1100 car spaces; and,
 - Close to Kidlington to serve the local population.
- 8.19.2 Two broad locations were identified, centred on Water Eaton and centred on Peartree. Four sites were considered at Water Eaton, and two at Peartree. They are shown on Figure IMG 7.1 in Appendix 7 of document CRCL/P/12/B. Site PT-B at Peartree was the only one of the six that was not in the Green Belt.
- 8.19.3 The same Appendix presents the North Oxford Station Sites Appraisal Report which concludes that, despite the benefits related to its proximity to the trunk road network and its potential to serve to prospective Northern Gateway development, the Peartree locations should be ruled out because they have these operational disadvantages:
- Engineering and traffic constraints;
 - Environmental impacts given their proximity to residential areas; and
 - Poor links to other parts of Oxford and to Kidlington.
- 8.19.4 All the Water Eaton station sites are in the Green Belt. The Scheme proposal offers these advantages:
- Greatest operational efficiency, given the location of the station;
 - Able to provide a multimodal interchange with the existing bus-based Park and Ride; and,
 - Secures the redevelopment of a brownfield site and demolition of a large and dominant building in the Green Belt.
- Aggregates Depot**
- 8.19.5 The replacement rail aggregates depot would enable Hanson Quarry Products Europe Limited ("Hanson", 6.55.29) to replicate its current operations on the new site and would not change its ability to source aggregates from current suppliers or supply materials to local markets. Chiltern is in discussion with Hanson regarding the layout of the new facility. The compensation code would apply to losses that Hanson may incur in moving to the proposed facility. The Scheme proposal accords with national policy MPS1 and would replicate a facility safeguarded by saved policies SD7 and SD9 of the Oxfordshire Mineral and Waste Local Plan.
- 8.19.6 Document CRCL/INQ/35 *Minerals Industry And Aggregate Depots In*
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Oxfordshire reviews local production of aggregates in Oxfordshire, including actual outputs for the 10 years to 2008 and that which is envisaged by the sub-regional apportionment set out in Policy M3 of the South East Plan. It considers the future demand for minerals in Oxfordshire, and identifies rail aggregate depots serving Oxford. It considers a development proposal by Kilbride Properties Limited for development (including, among other things, a rail aggregates depot) and restoration of the Shipton-on-Cherwell Quarry Site, for which planning permission was granted on 3 April 2009. The rail aggregates depot would be built only after limestone extraction at the site was complete, and so would be likely to open at least 7 years after development commences. No operator has been identified. Chiltern believes the Shipton siding proposal to be speculative and unlikely to become available to handle imported aggregates in a reasonable timescale, if at all. Shipton should be discounted as a feasible alternative to Water Eaton.

- 8.19.7 Document CRCL/INQ/35 concludes that the production of aggregates in Oxfordshire has been in steady decline, whilst the need for aggregates to supply existing markets and identified growth areas will if anything continue to increase. So there will be a continuing and growing need to import aggregates by rail to serve the local market. Other available sites will not be capable of meeting the growing demand. The disposition of rail aggregates around Oxford remains important to minimise haulage distances and avoid excess transport of materials on unsuitable local roads. The existing depot at Water Eaton and the relocated depot are both well placed to serve the Oxford sub-region, which is an area identified for continued growth.
- 8.19.8 The new aggregates depot would have only a minor impact on the open character of the landscape and, overall, the impacts on the local landscape in the Green Belt would not be significant. The new depot would only be potentially visible from the south-east as it would be largely screened from view on the north-west side by the A34 and the tree lines along the road and railway. A landscaped earth bund could be provided on the south-east side of the proposed aggregates depot to screen visually the proposed depot from the south-east as illustrated in the photomontages in drawings ERM.PM.CVP3 and ERM.PM.CVP3a in Appendix C to document CRCL/R/Obj195. And planning conditions are proposed by Chiltern which seek to protect the amenity of local residents, limit light spill, protect the integrity of the highway network, protect the visual amenity of the area and maintain the openness of the Green Belt.
- 8.19.9 On the grant of planning permission, the ownership of the site would transfer to Network Rail who is seeking to agree with Hanson to transfer their operations to the new site. The purpose of the planning permission for the replacement aggregates depot is not to benefit a "third party" (6.41.7), but to ensure the replacement of a safeguarded rail aggregates depot which is an important component of the Mineral Planning Authority's minerals policy to meet an increasing demand for imported aggregates.
- 8.19.10 No planning conditions control the operation of the existing aggregates

depot. Document CRCL/INQ/83, produced following discussions at the Inquiry's "Conditions" session, presents an assessment of the road traffic likely to be generated at the aggregates depot. A throughput of 350,000 tonnes per year is likely to give rise to around 32 outbound HGV movements during the morning peak (07:00 to 10:00). The capacity of the new Park and Ride and Station junction to the A4165 would be sufficient for a depot handling 350,000 tonnes. The qualitative evidence before the Inquiry considered, in effect, an aggregates depot, importing 120,000 tonnes per year by rail, without any road imports. Chiltern and Oxfordshire County Council consider that it would be prudent to impose a condition limiting aggregate imports to the terminal for rail only with an upper limit of 350,000 tonnes per year.

- 8.19.11 If the aggregates depot were to be relocated onto previously-developed land at the site (6.40.5), the station platforms would be separated from the remainder of the site by the depot and its rail connections, and a sizeable footbridge would be needed. Relocating the depot as suggested would result in a parking shortfall at the site (displacing parking to other sites or local roads), or in the displacement of part of the car park onto green field land.

Material Recovery Facility

- 8.19.12 The proposed site layout at Water Eaton Parkway was selected because it allows for the creation of the most effective multi-modal transport facility with integrated operation of the park and ride and station car parks. Any other layout would compromise the effective operation of the railway station and transport facilities.
- 8.19.13 The Scheme does not include a replacement waste facility because the MRF for which Oxfordshire County Council gave planning permission (ref 07/01857/CM) would not deal specifically with rail-transported waste, and could be accommodated elsewhere. Any new proposal for a replacement waste handling facility at Water Eaton or elsewhere would need to be the subject of a new planning application to be considered by the local planning authority against the tests in PPG2.
- 8.19.14 The resolution to grant planning permission for the MRF was made in September 2008 and, since then, Viridor has been awarded the Oxfordshire municipal waste contract and is the preferred bidder for a new energy from waste facility at Ardley which was recently granted planning permission. The Ardley facility would have a capacity of 300,000 tonnes per year.
- 8.19.15 Grundon Waste Management Limited ("Grundon") proposes an alternative layout at the Water Eaton site (6.50.13) with the following characteristics:
- a) Provision of a MRF retained in its approved position.
 - b) It lacks taxi waiting facilities, passenger drop-off/pick-up areas, and bicycle and motorcycle parking which the Scheme proposal (CRCL/INQ/54) would provide.
 - c) It is claimed to provide 850 parking spaces whereas the forecast demand, in 2026, is for 1036 parking spaces for rail users and the Phase 2 layout shown in document CRCL/INQ/54

would provide 1003 parking spaces.

- d) Extensive use of decked car parking to achieve the claimed 850 spaces, whereas the Scheme proposal would use decked car parking to a much lesser extent. A multi-deck car park or one that encroached on the existing Park and Ride car park would have a significant adverse impact on the openness of the Green Belt and be extremely difficult to justify against Green Belt policy. Chiltern expects the proposal would also be vigorously opposed by Oxfordshire County Council and other bodies.
- e) The presence of the MRF, a large building on a larger site, would introduce a very substantial barrier to pedestrian movement in the car park to and from the station and the bus stops.

- 8.19.16 The proposed MRF, of 5760 square metres on a 1.62 hectare site, could be accommodated elsewhere. As shown in the planning application submitted by Grundon for a MRF at Banbury (which is of similar build size, on a larger plot), such a facility can be located in more urban and industrial areas, and does not have to be located in the Green Belt. In examination, it was established that Chiltern had identified no alternative site for the MRF that was not in the Green Belt.
- 8.19.17 The Oxfordshire Interim Waste Needs Assessment report (Appendix B of CRCL.R/Obj102) suggests there is adequate capacity for recycling and composting at present. In addition, further capacity with planning permission of 310,000 tonnes per year which is yet to be built (including Grundon's proposed MRF) will be capable of meeting the capacity gap until 2020. While there may be market demand, and possible need, for an additional facility in future near Oxford, Water Eaton is not the best or only site.
- 8.19.18 The MRF proposed at Water Eaton is wholly incompatible with the provision of a well-integrated railway station with car park and park and ride facility. The public interest in securing good integrated transport facilities together with the proposal plainly outweighs by an enormous amount any interest in there being a waste facility.

Potential Future Development at Water Eaton

- 8.19.19 Chiltern does not seek to acquire the present park and ride car park, or the bus terminal (6.40.7). Rather, Chiltern seeks to acquire certain permanent rights in order to secure access over the current access roads, obtain rights to install necessary services to the station site, secure improvements to the site's main access junction and to provide for more station parking. Chiltern does not propose any development beyond that associated with the Scheme as presented at the Inquiry. The works included in the Scheme take account of demand predicted up to 2026, but Chiltern would not build the car park deck until there was demand for it. Any future expansion would need separate planning permission.
- 8.19.20 The initial, refused, planning application made in the mid-1990s for a bus-based park and ride raised concerns regarding the impact of those

proposals on the Green Belt which related to the scale of the proposed B1 office development, which was not directly related to the operation of that park and ride proposal and which consequently failed the Green Belt tests of Planning Policy Guidance 2 *Green Belts*. There is no evidence to suggest that the Scheme would act as a catalyst for new development at Water Eaton, where the normal tight control of development in the Green Belt applies.

8.20 **Green Belt**

- 8.20.1 The Green Belt is not particularly narrow to the north of Oxford. The extent of the Green Belt which seeks to prevent the coalescence of the settlements of Kidlington and Oxford is shown in Appendix C of document CRCL/R/Obj195. The new station would be built on an existing brownfield site between the existing Park and Ride site and the A34 road, within the Green Belt. Those works would not be outside the existing developed area. The site for the proposed relocated rail aggregates depot is a narrow strip of land next to the railway corridor, and that development would not have a serious impact on the extent of the Green Belt here, or its purposes.

8.21 **Responses To Other Matters Raised In Objections**

Natural Light at Stable Close, Oxford

- 8.21.1 The works at Oxford station would involve demolishing a large parcel depot and replacing it with open platforms and a small accommodation building, up to 7 metres high above the existing car park level. The nearest part of that building would be some 35 metres from 12 Stable Close. There would be no reduction in natural light at Stable Close, and no adverse visual impact.

Lighting Installations On The Scheme

- 8.21.2 Lighting would be used only at stations and in tunnels. The majority of the route would not feature lighting, and there would be no demonstrable increase in light pollution. Lighting at stations would be provided to minimise light spill.

Public Health

- 8.21.3 All trains built since about 1990 have toilet retention tanks and do not discharge onto the track. Any Chiltern Railways trains in regular service on the Bicester to Oxford line would have retention tanks (6.55.50).

Flood Risk

- 8.21.4 Flood risk, including potential effects on flood flows, has been assessed throughout the development of the Scheme, in close consultation with the Environment Agency. The latest available flood history and modelling data are used. Detailed (level 3) flood risk assessment proposals will be developed. In terms of surface water drainage and fluvial risk sources, the Scheme would improve capacity and flood water storage.

Birch Sites Limited

- 8.21.5 Chiltern is prepared to enter an agreement with Birch Sites Limited ("Birch", 6.55.15) to provide an alternative access which would meet

Birch's objections in that respect. In any event, the temporary route on Birch's site would be securely fenced to prevent public access to Birch's land and the Chiltern's worksites. The development proposal to which Birch refers was the subject of planning permission (ref. 04/02756/OUT) which expired on 25 May 2009 without being implemented, and no further application has been made. The matters raised by Birch are capable of being resolved by compensation.

Parcels 30003 and 30004

- 8.21.6 These parcels may be required for the purposes of constructing Work No. 3 (6.55.32).

British Waterways Board

- 8.21.7 Since the Order application was made in January 2010, Chiltern has established that no strengthening works for the Scheme would be needed to bridge OXD50. Routine maintenance works may be needed during construction of the Scheme, and they are unlikely to disrupt use of the Canal and would be undertaken by (or on behalf of) Network Rail using existing powers.
- 8.21.8 Chiltern does not envisage a need to dewater either Castle Mill Stream or Rewley Abbey Stream. It would be necessary to temporarily block the Rewley Abbey Stream to boats and pedestrians during the works to extend the bridge carrying the railway over the stream. The duration of the closure has yet to be established but will be as short as possible, consistent with safety.
- 8.21.9 Chiltern has been in discussion with British Waterways Board ("BWB") to resolve the 14 matters raised by BWB (6.55.53). Agreement has been reached to the protective provisions for the protection of BWB, set out in document CRCL/INQ/6/1, and on 27 January 2011 the Agreement was with BWB for signature.

Defence Estates

- 8.21.10 Chiltern has responded to the letter of objection, negotiations have been entered and a draft agreement produced.

Utility Companies

- 8.21.11 The attention of Scottish and Southern Energy plc (6.55.5) and Southern Gas Networks plc (6.55.7) have been drawn to the protective provisions of Schedule 14 of the draft Order, and neither has since responded.
- 8.21.12 The draft Order with changes proposed by Chiltern was before the Inquiry as document CRCL/INQ/6/1, and incorporates protective provisions agreed with Thames Water Utilities Limited (6.55.16).

8.22 Proposed Modifications to the Draft Order

- 8.22.1 Document CD/1.2.2 is a draft Order, amended for the Inquiry and dated 24 January 2011. Document CRCL/INQ/6/1 replicates CD/1.2.2 and identifies the proposed changes from the published draft Order. Document CRCL/INQ/5/1 sets out the proposed changes to the Order as applied for in January 2010 and identifies the source of each.
- 8.22.2 The proposed changes include items of clarification, minor drafting changes, protective provisions agreed with Thames Water Utilities

Limited and those agreed with the British Waterways Board, and changes consequent upon changes to the Scheme proposal at Trap Ground Allotments and Port Meadow.

8.23 **Proposed Modifications to the Book of Reference**

- 8.23.1 Document CRCL/INQ/79 sets out at section 6 the modifications Chiltern proposes to the Book of Reference (CD/1.10). The following table summarises the requested modifications, full details of which are to be found in Document CRCL/INQ/79. Appendix 1 to that Document shows the proposed modified entries to the Book of Reference.

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Summary of Proposed Changes to the Book of Reference		
Number on Plan	Proposed Change	Reason
04003	Include David Aubrey Calcutt and James Aubrey Calcutt in cols. 3 & 5.	Previous omission.
04026 & 04028	Change area to 1124.63 sq m (04026) and 869.32 sq m (04028).	Agreement with owners.
07a005	Add various parties in respect of access.	Previous omission.
08b001, 08b002, 08b003	Remove plots.	Langford Lane Order Modification (CD/1.28).
08b004, 08b005 & 08b006	Add plots.	Langford Lane Order Modification (CD/1.28).
10022 & 10024	Add Secretary of State for Transport to cols 3 & 5. Identify as Crown Land.	Previous omission.
10023	Column 3: remove "in respect of highway".	Notices served by Highways Agency.
19008	Add Frank and Margaret Salussolia to column 3.	Previous omission.
19009	Add Henry Horton to column 3.	Previous omission.
20001	Add Henry Horton to column 3 and column 5 in respect of a small part.	Previous omission.
25001	Add The Provost Fellows and Scholars of Worcester College in the University of Oxford, in column 3.	Previous mapping error.
29002, 29003, 29004, 29005, 29006, 30009	Remove trustees Mackey, Pulzer and Mannion.	Mr Maclellan is the only remaining trustee.
29008, 29015, 29016, 29017, 29018	Remove plots.	Changed Scheme proposal; plots now not needed.
30004	Add John Keyes to column 5.	Previous omission.
31005	Add Network Rail Infrastructure Limited in column 5.	Previous omission.

8.24 Proposed Modifications to the Deposited Plans and Sections

- 8.24.1 Document CRCL/INQ/79 sets out at section 7 the modifications Chiltern proposes to the Deposited Plans and Sections (CD/1.9). The following table summarises the requested modifications, full details of which are to be found in Document CRCL/INQ/79.

Summary of Proposed Changes to the Deposited Plans and Sections		
Sheet	Proposed Change	Reason
4	Modify plots 04026 and 04028 as per CRCL/INQ/79 paragraph 6.3 and Appendix 3	Agreement with owners
29	Remove plots 29008, 29015, 29016, 29017, 29018.	Changed Scheme proposal; plots now not needed.
39	Delete "17098m ² " and replace it with "17093 square metres".	Drafting error.

8.25 **Proposed Modifications to the Planning Direction Drawings**

8.25.1 Document CRCL/INQ/79 sets out at section 8 the modifications Chiltern proposes to the Planning Direction Drawings (CD/1.13). The following table summarises the requested modifications, full details of which are to be found in Document CRCL/INQ/79. Appendix 4 to that Document shows the proposed modified Drawings.

Summary of Proposed Changes to the Planning Direction Drawings		
Sheet	Proposed Change	Reason
1	Add the Local Wildlife Site, east of Charbridge Lane.	Previous omission.
4	Modify planning application boundary to reflect changes in plots 04026 and 04028.	Agreement with owners.
9, 10 and 10a	Remove the former Wendlebury Ponds Local Wildlife Site (Site of Importance for Nature Conservation).	Site no longer designated (CD/1.27 para 15.48).
12a	Add the Wendlebury Meads and Mansmoor Closes SSSI.	Previous omission.
18 and 19	Show the revised boundary of the Islip Conservation Area.	Boundary changed.
29	Change planning application boundary.	Changed Scheme proposal.

8.26 **Modification to the Application for an Open Space Certificate**

8.26.1 Document CD1.25/1 is a copy of a letter to the National Unit for Land Acquisitions and Disposals in which Chiltern withdraw the application for an open space certificate (CD/1.25) insofar as it relates to rights land at Aristotle Lane, and rights land at Port Meadow. Due to changed Scheme proposals, permanent acquisition of that land is no longer sought.

8.27 **Other Proposed Modifications to the Draft Order, Deposited Plans and Sections, Planning Direction Drawings and Book of Reference**

Document CD/1.28 sets out modifications to the draft Order submissions arising from the revised proposals for Work No. 11. The revised proposals were publicised in the area and placed on deposit for public viewing from 9 September 2010 to 21 October 2010 at the places listed in the document. Amendments are proposed to the draft Order (Schedules 1, 3, 5, 6 and 12), to the deposited plans and sections (sheets 8b, 35 and 37), to the planning direction drawings (sheet 8b) and to the book of reference (page 48).

9 CONCLUSIONS

Bearing in mind the submissions and representations I have reported, I have reached the following conclusions, reference being given in brackets [] to other paragraphs where appropriate.

I consider general matters first. My next sections deal with the matters identified in the Secretary of State's Statement of Matters, dated 25 August 2010 (Document X/4), and other relevant issues raised. Those items are considered in the following order:

Section in these Conclusions	Item in Statement of Matters
9.2	1
9.3	2
9.4	3
9.5	13
9.6	15
9.7	6
9.8	5
9.9	7
9.10	8
9.11	10
9.12	11
9.13	Other relevant issues
9.14	9
9.15	4
9.16	12
9.17	14

Finally, I conclude on the matters of whether an Order should be made, whether an Exchange Land Certificate should be given, and whether deemed planning permission should be granted.

9.1 General Matters

Environmental Assessment

9.1.1 The Environmental Statement is set out in the following documents:

- Volumes 1 to 4 (Documents CD/1.15, CD/1.16, CD/1.17 and CD/1.18).
- Non-Technical Summary (Document CD/1.20).
- Addendum to the Environmental Statement (Document CD/1.22).
- Second Addendum to the Environmental Statement (Document CD/1.22/1).

- 9.1.2 The Environmental Statement and other environmental information, including comments and representations made by statutory consultees and other parties, have all been taken into account in the preparation of this report, as has subsequent evidence given at the Inquiry regarding the environmental effects of the Scheme.

9.2 **Aims, Objectives and Need**

SM1 The aims and objectives of, and the need for, the proposed connection between the London to Birmingham Railway and the Bicester to Oxford railway and the proposed improvements to the line between Bicester Town station and Oxford station ("the Scheme").

Aims and Objectives

- 9.2.1 The franchise agreement by which The Chiltern Railway Company Limited ("Chiltern") operates allows Chiltern to promote projects to the Department for Transport. The Scheme is one such project. [4.1.7, 4.1.8]
- 9.2.2 The objectives and aims of the Scheme [1.3] are:
- To increase rail capacity in the Oxford-London corridor;
 - To provide improved access to the rail network for Oxford and north Oxfordshire;
 - To provide a sustainable alternative to the car, particularly for commuting journeys into Oxford;
 - To help deliver public policies for economic and spatial development;
 - To facilitate the East West Rail Link;
 - To extend the use of an environmentally-friendly and safe form of transport; and,
 - To facilitate the redevelopment of Oxford station.

Need: Increase Rail Capacity On The Oxford-London Corridor

- 9.2.3 Rail traffic in Britain has increased in recent years to an unprecedented degree [4.2.3]. Rail traffic from Oxford has increased by over 30% since 2006 and continues to grow. Substantial housing and commercial growth is planned in Bicester and Oxford during the next 15 years, and the A34 and M40 roads are expected to be at 130% of their capacity by 2026. Growth will add to the pressure on the railways. The current service to London Paddington via Reading experiences significant overcrowding on peak-hour trains to London, and at Oxford station. Those lines operate at or near full capacity, as does Paddington station, and there is little scope for additional trains. Rail ridership between Oxford and London is proportionately less than half that between Cambridge and London [4.2.4, 4.2.5, 4.2.9, 4.2.10].
- 9.2.4 Network Rail's Route Utilisation Studies recommend that the Scheme should proceed [4.2.7], and Network Rail supports the Scheme: they consider it would increase rail network availability, capability and

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- capacity [5.7.2].
- 9.2.5 The need for the scheme in improving rail access was emphasised by several of the parties who appeared in its support [for example 5.2.2, 5.6.2, 5.8.1]. It was also argued in objection to the Scheme that the current
- 9.2.6 Objectors to the principle of an improved rail service such as that which the Scheme would offer considered that express coaches to London provide a substitute for the train [6.53.6], that current uncertainty about the South East Plan calls into question the view that growth in Oxford should be planned for [6.54.1 *et seq*], and that the existing service is sufficient and is not overcrowded [6.21.7]. As to the first of those, I find no reason to suppose that the users of the trains to London are unaware of the express coach option and so am led to the view that, for those individuals at least, the coach is an unsatisfactory alternative: perhaps for the reasons suggested by Chiltern [8.5.8].
- 9.2.7 The South East Plan remains part of the development plan [3.2.3]. That position is reinforced by the stance of Oxford City Council, which has resolved to continue with its emerging Core Strategy and its housing target of 8,000 new homes between 2006 and 2026, replicating Policy CO3 of the South East Plan. And the Oxfordshire City Region Local Enterprise Partnership has identified Bicester as a key growth point, with substantial residential and employment development under consideration for the MoD site at Graven Hill and elsewhere, for which the Scheme would be vital. The underlying drivers for economic growth and new housing remain, in the areas that the Scheme would serve [8.1.4, 5.3.3, 5.3.4].
- 9.2.8 As to current overcrowding, I note the view of an objector that there is none at peak hours on the current Oxford to Paddington service [6.21.7]. Two supporters of the Scheme see improved reliability and passenger choice, rather than overcrowding relief, as important benefits of the Scheme [5.5.6, 5.6.2]. Chiltern's evidence is that peak overcrowding on Oxford to London trains is common (but not universal) at Paddington, with load factors often over 100% and rising to 188%, that rail patronage has increased substantially in recent years, both nationally and between London and Oxford, and that further growth is forecast [4.2.3 to 4.2.5]. That evidence was not challenged in examination and I attribute more weight to it as representative of overall conditions than I do to the necessarily less comprehensive view of three individual passengers.
- 9.2.9 I am therefore satisfied that there is a strong need to increase rail capacity in the Oxford-London corridor.
- Need: Improved access to the railway for Oxford and north Oxfordshire***
- 9.2.10 Road access to Oxford station is congested at peak times. The station is effectively remote from many of Oxford's residential and business areas. Kidlington is a sizeable settlement with no convenient access to the railway [4.2.1b), 5.10.3]. Congestion aside, there was no evidence of any specific disbenefit that arises from the current arrangement for access to the railway. Improved access to the railway is desirable so as
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to shorten journey times.

Need: Sustainable Alternative To The Car, Particularly For Commuting Journeys Into Oxford

- 9.2.11 Chiltern identifies the need for a sustainable alternative to the car to arise from traffic congestion in the Oxford area, particularly at peak periods, and that was not disputed [4.2.1c) and d)]. Others connected traffic volumes to air quality, and the sixth objective of the Scheme addresses that. The transportation benefits of reducing road congestion are widely recognised, and I have no doubt that they are needed in the area the Scheme would serve.

Need: Delivery Of Public Policies For Economic And Spatial Development

- 9.2.12 No example was given of a public policy measure or development proposal that could not progress without the Scheme. PPS1 and PPG13 emphasise the need for sufficient appropriate transport measures to be put in place to support development, and substantial development, which the Scheme would serve, is planned at Oxford and at Bicester [4.2.1d), 8.1.4, 4.2.29].

Need: To Facilitate The East West Rail Link

- 9.2.13 If the East West Rail Link were to proceed, the Scheme would form part of its western section [4.1.14, 4.1.15]. Only the most general evidence of the benefits of East West Rail was brought to the Inquiry, and that scheme is not currently before the Secretaries of State. The Milton Keynes and South Midlands Sub-Regional Strategy takes the view that any decision on the East West Rail Western Section should be informed by the results of an expected study on transport and growth there [4.3.3]. East West Rail is not expected to be authorised until 2014, probably following a Transport and Works Act Order application [4.1.15, 4.3.10]. I conclude that there is no currently demonstrated need to facilitate the East West Rail Link, but that such a need may arise in future.

Need: To Extend The Use Of An Environmentally Friendly And Safe Form Of Transport

- 9.2.14 Chiltern identifies this objective to serve the need to reduce carbon dioxide emissions [4.2.1f)]. Others connect traffic volumes to air quality [6.13.4, 6.20, 6.32.5]. No party argued against those propositions, and I have no doubt that there is a need for them to be pursued in the area the Scheme would serve.

Need: To Facilitate The Redevelopment Of Oxford Station

- 9.2.15 There was no dispute that Oxford station should be improved, to increase its capacity and to improve its appearance as an entry to Oxford [4.2.6].

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9.3 **SM2 The justifications for the particular proposals in the draft TWA Order, including the anticipated transportation, regeneration, environmental and socio-economic benefits of the Scheme**

9.3.1 I now consider the extents to which the Scheme proposals in the draft TWA Order (with the proposed amendments) would be likely to satisfy the stated objectives of the Scheme.

Objective: To Increase Rail Capacity On The Oxford-London Corridor

9.3.2 The Scheme would run two trains per hour in each direction between Oxford and the London terminus at Marylebone, calling at High Wycombe, Bicester Town and Water Eaton Parkway, with selected trains calling at Islip [4.2.23]. The new service would be quicker than the existing alternatives (although some current services to Paddington are 12 minutes faster than the new service would be), and interchange with the Underground is comparable at both termini [4.2.27, 4.2.28, 6.21.7]. I am satisfied that the Scheme would provide increased rail capacity on the Oxford-London Corridor, and that this would be a transportation benefit.

9.3.3 The Scheme would provide competitive choice for rail travel between Oxford and London, and I am satisfied that passengers may benefit from that [4.4.13].

Objective: To Provide Improved Access To The Railway For Oxford And North Oxfordshire

9.3.4 The evidence is that improved access to the railway is needed for Oxford and north Oxfordshire because the current arrangement increases traffic congestion and because traffic congestion currently impedes access to the railway [9.2.10]. Clearly, the provision of a new parkway station at Water Eaton and a new through station at Bicester [4.4.13] would improve access to the railway for many; for example, those in north Oxford, Kidlington and north and west Oxfordshire. The objective would be met. This would be a further transportation benefit.

Objective: To Provide A Sustainable Alternative To The Car, Particularly For Commuting Journeys Into Oxford

9.3.5 There was no dispute that rail travel that the Scheme would provide would be more sustainable than travel by private car [4.2.11]. The focus of the Scheme's third objective is the Scheme's effect in reducing traffic congestion [9.2.11].

9.3.6 Evidence was given of changes in peak hour road traffic conditions in 2016 that would follow the introduction of the Scheme:

- a) There would be an increase in overall average traffic speed (for example, from 60.7 kph to 60.9 kph, or some 0.33%) and the time spent by traffic in over-capacity queues would fall (for example, from 1157 hours to 1092 hours, or some 5.6%)

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- [4.7.23];
- b) Traffic flows on the A34 trunk road near Water Eaton would experience changes of only slight to negligible significance [4.7.21];
 - c) 139 trips would transfer from car to rail during the AM peak hour and during the PM peak hour [4.7.20];
 - d) Traffic flows at Oxford station would change by 1 vehicle per hour in the AM and PM peak hours [4.7.19]. AM peak hour traffic on the Botley Road in 2026 would fall from 1417 vehicles per hour to 1384 as a result of the Scheme [8.9.3];
 - e) Average journey times along London Road, Bicester, during the 3-hour AM and PM peak periods would increase [4.7.25].
- 9.3.7 The Scheme would make no changes to the road layout on the A34 or near Oxford station and the traffic changes there would be slight or less, and I therefore conclude that changes in peak traffic congestion at those locations would also be slight or less.
- 9.3.8 The Scheme would, in aggregate, result in a reduction of some 5.6% in the time spent by traffic in over-capacity queues in the peak hours, and an increase in peak hour average traffic speed of some 0.33%, and to that extent would meet the objective of reducing road traffic congestion for commuting journeys into Oxford. These would be transportation benefits.
- 9.3.9 There was no corresponding evidence of the effects the Scheme might have during the off-peak hours. Chiltern's assessments of annual average daily traffic for sites near Water Eaton Parkway station and at Bicester [4.11.75] show traffic increases at other times of day.
- Objective: Delivery Of Public Policies For Economic And Spatial Development***
- 9.3.10 Chiltern points to the general connection that is often found between new and upgraded rail services and regeneration [4.2.14]. But no example was given of a public policy measure (other than those relating to the Scheme itself) or a development that could not proceed without the Scheme. Although Chiltern considers that the Scheme would encourage planned growth such as at North Bicester, and intends to cooperate with local authorities and developers there to ensure full integration of both Bicester stations into the developing town [4.4.13, 4.2.29], no evidence was brought to show that any particular development proposal would depend on the Scheme.
- 9.3.11 Chiltern contends that the new service would result in wider economic benefits, over the 60-year assessment period, with a discounted net present value of some £44 million. That figure is obtained by applying a factor of 20% to the user benefits estimated to accrue from the Scheme. The 20% figure is obtained from the business cases for other rail schemes, in Melbourne, London and elsewhere, all of which took place in major city areas which do not provide exact comparisons with the Scheme proposal. [4.4.18 to 4.4.21]. While it may well be that some regenerative or socio-economic effect might flow from the Scheme, it seems to me that without application of the draft WebTAG methodology
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[4.4.18], or other authoritative analysis, and without a robust demonstration of how experience from studies on different types of scheme elsewhere is applicable to the Scheme, little credence can be given to any quantification of that effect.

Objective: To Facilitate The East-West Link

- 9.3.12 The Scheme would include measures needed only for the East-West Link, with financial support from DfT [4.1.13 to 4.1.15]. I am satisfied that the Scheme would facilitate the East-West Link so far as is reasonable given the geographic extent of the Scheme and the reported current state of preparedness of the East-West Link.

Objective: To Extend The Use Of An Environmentally-Friendly And Safe Form Of Transport

- 9.3.13 There is no dispute that the Scheme would extend the use of rail travel and that the Scheme would result in reductions of annual carbon emissions by 1100 tonnes during 2016 and 1200 tonnes during 2026 [4.11.82].
- 9.3.14 Use of the Scheme would give rise to NOx and other undesirable emissions [4.9.10], and I consider those later.
- 9.3.15 Traffic reductions resulting from the Scheme would result in fewer road traffic accidents [4.4.16].

Objective: To Facilitate The Redevelopment Of Oxford Station

- 9.3.16 The Scheme would make alterations at Oxford station as necessary to accommodate the trains that would use the Scheme, and Chiltern would co-operate with the station facility owner and others in the improvement and redevelopment of the Station [4.5.35]. There was no evidence that proposals for the station redevelopment necessarily depend on the Scheme, but the Scheme's works there could enhance part of the whole station.

Further Benefits Of The Scheme, Identified By Chiltern

- 9.3.17 I am satisfied that the proposed closures of level crossings on the line would reduce the risks of collisions with trains [4.2.13]. I consider later in this report other matters associated with the proposed level crossing closures.
- 9.3.18 Chiltern draws attention to enhancing the environmental capacity of Oxford, by improving connectivity, enhancing sustainable capacity and addressing traffic congestion [4.4.13]. I am satisfied that the co-location of the proposed Water Eaton Parkway station with an existing bus-based park and ride site for Oxford would be to the benefit of travellers and would improve connectivity. I have previously considered the Scheme's effects on traffic congestion.

- 9.4 **SM3 The main alternative options considered by Chiltern Railways and the reasons for choosing the proposals comprised in the Scheme.**

- 9.4.1 In developing the Scheme, Chiltern considered non-rail options, rail-

based route options, and variations within the Oxford to Bicester corridor. Their purpose was to satisfy the objectives set out in the Statement of Aims [4.2.15, 1.3].

9.4.2 Three non-rail based options were considered and rejected [4.2.16]:

- a) Park and ride, using an existing railhead at either Banbury, Bicester North or Haddenham & Thame Parkway. These locations would be too far from Oxford, and therefore unsustainable in travel terms. There are also capacity problems with the existing car parks at these sites.
- b) Conventional bus to an existing railhead would be slower and less reliable than a rail link. The increased number of interchanges on each trip would make the journey uncompetitive in terms of time and convenience.
- c) Guided bus along the Oxford-Bicester railway route would enable faster and more reliable bus journeys than could be achieved on the public road. But busway technology has proved unreliable elsewhere. The capital cost would be considerable. Use of the railway would be denied to MoD Bicester and other existing freight movements.
- d) None of the above would assist the East-West Rail project.

9.4.3 Three rail-based options were considered [4.2.18, 4.2.19]. The Chinnor Branch would diverge from the main line at Princes Risborough and make its way along a former railway via Chinnor to a new parkway station near Junction 6 on the M40. This option found a lack of stakeholder support and low forecast patronage, and so was not pursued.

9.4.4 The Northern Corridor followed the alignment of the Scheme proposal, with some variation. The Southern Corridor would include the reinstatement of a former railway between Kennington Junction, on the Didcot line south of Oxford, and Chiltern's main line at Princes Risborough; and with a parkway station near Junction 8 on the M40. The two were compared in a report to the Strategic Rail Authority in 2003, which found the Northern Corridor to have the following advantages over that to the south:

- a) Much of the Southern Corridor had been built over and so would be more disruptive and difficult to build on than the Northern Corridor, which largely follows an existing railway.
- b) The Northern Corridor's proposed Water Eaton parkway station would have excellent links to Oxford city centre and other key locations, and would be easily accessible by car.
- c) Extra revenue, and commensurate socio-economic benefits, would come from improving the Bicester Town to Oxford commuter service.
- d) The Northern Corridor would support development of East West Rail, whereas the Southern Corridor would not.
- e) Additional track could be provided along the main line north of Oxford to serve the Northern Corridor, whereas the Southern Corridor would need to use the currently congested main line

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- south from Oxford station.
- f) The Northern Corridor would be more cost effective than the Southern Corridor.
- 9.4.5 Within the Northern Corridor, various design options were considered [4.2.21]:
- a) Various options were considered for the connections to the main lines at Bicester and at Oxford. The Scheme proposal is to be preferred on grounds of cost, effect on the community and ability to serve Bicester.
- b) Alternative station sites were considered near Bicester but none was so convenient for passengers as Bicester Town station.
- c) Halts along the line would not be re-opened because their revenue potential would be minimal.
- d) A parkway station at Peartree instead of Water Eaton was rejected on grounds of poor bus accessibility, greater distance from Kidlington, and effects on the environment and on local people.
- 9.4.6 A further option (for an alternative alignment west of Peartree) within the Northern Corridor was suggested by objectors and considered by Chiltern during the Inquiry [6.22.3, 6.20.30, 8.8.1]. Objectors consider the alternative would be less intrusive than the Scheme, because it would be further from housing. I consider the effect (by virtue of noise and vibration) the Scheme would have on housing, elsewhere in this report and find that, subject to conditions, the effect would be acceptable. It is clear to me that the suggested alternative would be more complex and disruptive to build and more costly than the Scheme proposal, and would introduce greater environmental difficulties including (among other things) widening of the railway adjacent to the Hook Meadow and Trap Grounds Site of Special Scientific Interest and the Port Meadow with Wolvercote Common and Green SSSI. Nor would it address any fundamental fault in the Scheme. The suggested alternative need not be pursued.
- 9.4.7 Chiltern's reasons for choosing the proposals comprised in the Scheme are that, in summary:
- The Scheme proposal is to be preferred to the alternatives considered, for the reasons given;
 - The Scheme proposal meets the objectives set out in the Statement of Aims and the other relevant considerations identified by Chiltern [4.2.2];
 - The detailed Scheme proposals are acceptable and necessary for the safe and effective operation of the railway;
 - Those elements of the Scheme that would be in the Green Belt are, where necessary, justified by the circumstances attaching to the Scheme and the rail aggregates depot [4.11.30].
- 9.4.8 I am satisfied that the Scheme proposal is to be preferred to the
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alternatives considered.

9.5 **SM13 Chiltern Railways' Proposals For Funding The Scheme.**

9.5.1 Chiltern proposes to fund the Scheme as follows [4.1.12 to 4.1.17]:

- a) Phase 1 (which would include all works necessary to operate passenger trains from Oxford to the main line at Bicester via the Bicester Chord) would be financed as a private commercial venture, with capital costs funded from farebox earnings. There would be no public subsidy. Capital costs would be met initially by payments from Network Rail to Chiltern as construction progresses, and Chiltern (and its successors after the franchise ended in 2021) would then repay Network Rail by means of a facility charge over the 30-year financing life of the project.
- b) Phase 2A (which would increase the loading gauge on the line to "W12+" standard by means of works in Wolvercot Tunnel and elsewhere, in readiness for use of the line by freight trains if the East West Rail project proceeds and the line became part of the Strategic Rail Freight Network) would be funded by a direct financial contribution by the Department for Transport, which the DfT has undertaken to provide.
- c) Phase 2B (which would further upgrade the line as necessary for the East West Rail project) would depend on the East West Rail project being authorised, and full approval of that scheme will depend on the availability of funding for the 2014 to 2019 High Level Output Specification period, and probably the outcome of an application for a Transport and Works Act Order [4.3.7 to 4.3.10].

9.5.2 Objectors raised various issues relating to funding:

- a) The justification for meeting the cost of the Phase 2A works to Wolvercot Tunnel was queried. But the evidence is that funding for those works is available and has been confirmed [6.43.4, 4.1.14].
- b) It is contended that there is no evidence that East West Rail has any importance to the national economy. But the DfT has found that the route would be among the nationally most important for freight, and I attribute considerable weight to that. [6.43.6, 4.1.14]
- c) It is clear to me that objections that the cost of new rolling stock is omitted from the business model do not recognise that the Scheme would be served by existing rolling stock [6.53.4c), 8.5.5d)].
- d) The incremental maintenance and renewals cost has been queried and confirmed [6.53.4b), 8.5.5c)].
- e) The business case is made by comparing the total revenues over the period 2012 to 2021 with the total costs over the

same period. The finding is that revenue exceeds costs, and that the Scheme proposal is commercially viable. One objector does not agree, and considers entirely improbable the position that Chiltern could ever repay the facility charge. I weigh that position, and the reasoning that lies behind it, against that of the applicant, the readiness of Network Rail to finance the project in the expectation that Chiltern will make repayments as necessary, and the Department for Transport's auditing and approval of the business case. I do not find that the objection outweighs the case in favour of the Scheme's business case [6.53.4, 8.5.5a), 4.1.13c), 4.1.17].

- f) The owners of the site of the proposed Chord query the overall provision made by Chiltern for land acquisition [6.55.83], but Chiltern has explained its land valuation method [8.5.13] and I find no reason to conclude that it is not robust.

9.5.3 The passenger forecasts and economic analysis that underlie the Scheme were also challenged in various ways:

- Scenarios were postulated whereby the route to Oxford station might be improved, or more parking provided for those who arrive there: but there is no evidence of how that might be done to achieve a comparable improvement to rail access to that claimed for the Scheme, or who would pay; and no such proposal is before me or the Secretary of State [6.53.8].
- Chiltern applies a weighting of 4 to drive times to either Oxford station or Water Eaton, and objectors respond that that is unrealistic, and that a truer measure would show the generalised time saving offered by the Scheme for a trip from Witney to a London terminus to be 10.75 minutes rather than the 17 minutes (a saving from a generalised time of 180 minutes) claimed by Chiltern [6.53.9, 8.5.10]. I remind myself that catchment analysis modelling does not lead to precise estimates of traveller numbers. An accuracy of plus or minus 20% is suggested as a reasonable level of accuracy, and a check of results elsewhere found that about 40% of a sample of forecasts met that level of accuracy, and that errors of between 6% and 21% were found at four origin stations – perhaps the most comparable type to Water Eaton [4.4.3b)]. I note too that the service from Oxford to Paddington currently takes between 54 and 92 minutes, whereas Chiltern's generalised time model represents this by a single value of 61 minutes [4.2.27, 8.5.10]. And it is pointed out that Paddington and Marylebone stations are some 10 minutes' walk apart, with different degrees of access to the Underground and, in future, Crossrail [6.21.7, 6.53.7, 6.20.25 point 5]. It is clear that different passengers would exercise their choice between the two routes in the light of many individual factors, and it seems to me that the modelling approach provided by Chiltern provides a sufficient basis for decision-making providing the uncertainties are allowed for. I note too that the trains proposed to use the Scheme are fewer than those which link Oxford to Paddington, and so do not regard as a flaw in the Scheme the possibility that fewer people might choose the Scheme trains than choose the Paddington option [4.2.23, 4.2.6].

- Although there was a degree of agreement that the economic analysis correctly reflects DfT appraisal methods, objections were raised to the effect that those methods are unsound. That is not a matter for consideration here [8.5.11, 6.53.11, 6.20.25 point 5].
- Dr Hope argued that the demand forecast for the Scheme was weakened in that other competing transport modes had not been considered in the analysis. But Chiltern's assessment follows Government guidance, and Dr Hope did not argue that the guidance of WebTAG and the Passenger Demand Forecasting Handbook had been misapplied [6.55.42, 8.5.12].

9.5.4 Having considered all matters raised, I conclude that sufficient arrangements have been made for funding Phases 1 and 2A of the project.

9.5.5 As to Phase 2B, there is a timing mismatch in that funding for Phase 2B is not expected to become available until 2014, whereas the Scheme was expected at the Inquiry to be brought into use in May 2013 [4.1.15, 4.1.13].

9.6 **SM15 The purpose and effect of any substantive changes proposed by Chiltern Railways to the draft TWA Order and whether anyone whose interests are likely to be affected by such changes has been notified.**

9.6.1 The attention of the Secretaries of State is drawn to sections 8.22 to 8.27 of this report which summarise the changes proposed by Chiltern to the Order and other documents, as follows:

<u>Section</u>	<u>Proposed Modification</u>
8.22	Draft Order
8.23	Book Of Reference
8.24	Deposited Plans And Sections
8.25	Planning Direction Drawings
8.26	Open Space Certificate
8.27	Further changes

9.6.2 The substantive changes are:

- The addition of protective provisions, which have been agreed with Thames Water Utilities Limited;
- The addition of protective provisions, which are reported to have been agreed with British Waterways Board;
- Changes consequent upon Chiltern's changed proposals for works and rights on Port Meadow;
- Changes consequent upon the changed proposed alignment of Work No. 11.

9.6.3 The changes made by Chiltern to its proposals for Port Meadow include:

- Withdrawal of the published proposal to secure vehicular access rights

for allotment holders across Port Meadow from Walton Well Road [4.5.33]; and,

- Withdrawal of the published proposal to build a ramp from the Aristotle Lane bridge into the Trap Ground Allotments [4.11.33].

9.6.4 The changes made by Chiltern to its proposals for Work No. 11 include a modified alignment of the proposed road where it would lie to the west of the Alchester Roman town scheduled monument [4.5.12].

9.6.5 I am satisfied that the changes proposed by Chiltern to be made to the published Order, the book of reference, the deposited plans and sections, the planning direction drawings and the open space certificate have the purpose and effect of bringing the draft Order and its supporting documents into conformity with the Scheme as promoted by Chiltern at the end of the Inquiry and of more appropriately safeguarding the interests of Thames Water Utilities Limited and the British Waterways Board. It seems to me that the the proposed Schedule 17 would address those matters raised by BWB that would not be otherwise addressed by proposed planning conditions, other than the signing of BWB's code of practice, and the matter of costs (for which no application was made). I am further satisfied, from the evidence provided by Chiltern and from representations made at the Inquiry, that those whose interests are likely to be affected by such changes had been notified of them. [8.2.12, 8.21.9, 8.21.12, 8.22.2, 0, 6.4.13, 3.7.4]

9.7 **SM6 The likely impacts of the Scheme on users of the rights of way network, including:**

- a) **The impacts of constructing the scheme on road traffic in the area;**
- b) **The operational effects of the scheme on road traffic, including the effects of increased closure times at the London Road level crossing in Bicester; and,**
- c) **The effects of the proposed permanent closure of road, footpath, bridleway and accommodation level crossings of the Bicester to Oxford railway line.**

a) *The Impacts Of Constructing The Scheme On Road Traffic In The Area*

9.7.1 Generally, construction of the Scheme would add 100 vehicles per day, or fewer, to the major road network and 50 vehicles per day, or fewer, to other roads. On occasion these numbers would be exceeded for limited periods. These figures are robust, in that Chiltern intends to use rail haulage where feasible and reasonable but the construction traffic estimates make no reduction for that [4.7.29 to 4.7.31]. There is no detailed assessment of the effect of such changes in traffic but it seems to me that an increase of the order of 100 vehicles per day would have no perceptible effect on the network of major roads near the Scheme, where flows of up to 52,000 vehicles per day are to be found on the A34, or 15,000 vehicles per day on the A4165 [4.7.5]. And I note also that

the highway authorities raise no objection to the proposal.

9.7.2 There are some instances where construction of the Scheme would give rise to unusual traffic that might, in Chiltern's contention, cause localised temporary disruption. An example of this might be in Mansmoor Road, a relatively narrow country lane along which large loads would need to be carried for the bridge proposed as part of Work No. 13 [8.12.5]. No reasoned case was put that this would necessarily cause unreasonable inconvenience to other users of Mansmoor Road, and there was no suggestion that proper arrangements could not be made for the management of exceptional cases such as this.

9.7.3 I conclude that the likely effect of the construction of the Scheme on road traffic in the area would, in most cases, not be perceptibly harmful and could elsewhere be acceptable. Acceptability would depend in large part on the arrangements made through the Code of Construction Practice in the form in which it would be approved by the local planning authorities.

b) Operational Effects On Road Traffic

9.7.4 The effects of the Scheme over a wide area including much of Oxford, Bicester and a large area beyond have been assessed using Oxfordshire County Council's Central Oxfordshire Transport Model, which includes a SATURN model of the Scheme rail passenger catchment. The SATURN model meets the acceptability criteria of the Design Manual for Roads and Bridges, and forecasts conditions in the morning and evening peak hours (0800 to 0900 and 1700 to 1800) [4.7.16, 4.7.27]. There was no reasoned challenge to this modelling, and I am satisfied that it provides a reasonable estimation of future traffic conditions for the two hours modelled.

9.7.5 The modelling finds that traffic conditions would improve in the peak hours as a result of the Scheme. The applicant offers the following table by way of illustration [4.7.23], and it seems to me that the benefits in the morning peak hour would be proportionately slight:

Central Oxfordshire Transport Model (SATURN) Simulation Summary Statistics – 2016 AM Highway Peak Hour (08:00 to 09:00)						
Case	Total Journey Time (hrs)	Total Journey Distance (km)	Overall Average Speed (kph)	CO ₂ Emissions (kg)	Over-Capacity Queues (hrs)	Total Trips (pcus)
Without Scheme	20669	1254779	60.7	76649	1157	76907
With Scheme	20475	1245891	60.9	76492	1092	76884
Benefits of Scheme	-195	-8888	+0.2	-157	-65	-23

9.7.6 At Oxford station in the 2016 AM and PM peak cases modelled, traffic flows would change by 1 vehicle per hour as a result of the Scheme.

Elsewhere on the network the peak hour changes would also be small [4.7.19].

- 9.7.7 Locations close to the Water Eaton station site were modelled in more detail in a way accepted by the local highway authority and, in the case of the A34(T), the Highways Agency. The findings were that at these locations (where the traffic generated by the scheme would be most concentrated) and with the proposed alterations at the entrance to the park and ride site, the Scheme would have no unacceptable effect on traffic conditions [4.7.18] and those findings are not challenged by either of the highway authorities.
- 9.7.8 I therefore find that operation of the Scheme would, when considered across the network as a whole have no unacceptable effect on peak hour road traffic conditions, and would result in slight improvements in peak hour journey time, distance travelled, overall average speed, emissions of carbon dioxide, queuing, and number of trips.
- 9.7.9 At London Road, Bicester, few trains currently use the level crossing but the Scheme would increase that frequency by four passenger trains per hour. The consequent increase in traffic delay has been modelled. Neither the method nor the findings were the subject of reasoned challenge. The findings were that, on average during the peak hours, London Road traffic would be delayed by the following amounts of time relative to the 2009 case [calculated from table at 4.7.25]:

Average Increased Journey Times In Seconds For London Road Traffic (Compared With 2009 base)					
Case	Closures	AM Peak		PM Peak	
		N/bound	S/bound	N/bound	S/bound
2009 Base Year		0	0	0	0
2016 with Scheme	2 min	14	13	16	17
2016 with Scheme	3 min	23	22	27	29
2026 with Scheme	2 min	17	21	20	32
2026 with Scheme	3 min	25	32	31	48
2026 Scheme + EWR	2 min	26	29	30	37
2026 Scheme + EWR	3 min	41	47	46	60

- 9.7.10 2-minute closures would be normal for passenger services [4.7.24], and the East West Rail scheme is not the subject of the current application. In normal circumstances, the average road traffic journey time along London Road would be increased by up to 32 seconds as a result of the Scheme.
- 9.7.11 Objectors have suggested that the delays associated with the Scheme would be unacceptable [6.30.2, 6.37.1, 6.45.3], but it seems to me that routine localised average delays of up to 32 seconds (or even, exceptionally, 48 seconds) are part of the general experience of driving at peak times, and commonly arise – for example at traffic signals – without serious consequences. Chiltern has considered the possibility of providing a road bridge over the railway in London Road but rejected it

because, in Chiltern's view [8.9.6]:

- None of the options provided an entirely satisfactory solution;
- All had considerable adverse property impacts; and,
- The land and property costs involved in acquisition of land and demolition of existing properties could not be justified.

- 9.7.12 No reasoned case was put to counter that view. The local highway authority raised no objection to the Scheme proposal [6.55.37, 6.55.38]. I find that the Scheme proposal would be acceptable in respect of its effect on traffic flows in London Road Bicester.
- 9.7.13 I note too the unchallenged finding that the modelled difference in road network performance in Bicester generally that the Scheme would cause would be negligible [4.7.27]. There is therefore no need to pursue alternative highway arrangements such as that suggested by Mr van Wijngaarden or that suggested by Mr and Mrs Davies [6.55.84, 6.37.3].
- 9.7.14 The Cyclists' Touring Club is concerned that the London Road level crossing is hazardous for cyclists because the railway crosses the road at a skew angle. The Scheme would double the track there. There is no evidence that the current arrangement there has caused cyclists to fall and no authoritative design standard that might be applied to the situation. In view of the safe performance of the current arrangement, I find no reason to require modification of the Scheme proposals in this respect [6.46.4]. The Bus Users UK Oxford Group suggested that a foot and cycle bridge over the railway might beneficially be provided in London Road, to encourage sustainable travel; but this would be inconvenient to use (by virtue of constraints at the site) and need not, in my view, be pursued [6.45.3, 8.9.7].
- 9.7.15 Mr M Richardson and Mr D Richardson object to the proposed altered junction of Station Approach and London Road, Bicester, wishing to argue that the junction could be configured differently so as to avoid their land [6.55.31]. They did not show how this might be done. I find nothing here to lead away from the Scheme proposal.

c) The Effects On Users Of The Rights Of Way Network Of The Proposed Level Crossing Closures

- 9.7.16 Here, I take the term "rights of way network" to mean roads, bridleways and footpaths. No other type of public right of way would be affected by the Scheme. I consider the effects of the proposed closures of accommodation level crossings elsewhere in this report.
- 9.7.17 **Tubbs Lane level crossing** allows users of footpath FP129/3 to cross the railway. The Scheme would close the level crossing and provide a footbridge instead (Work No. 9). The footbridge would have steps and ramps, thereby providing for inclusive mobility [4.5.6, 8.14.11].
- 9.7.18 Two objectors referred to this proposal. Cherwell District Council mentions the visual effect of the proposed bridge [6.55.86], and I consider that elsewhere. The Cyclists' Touring Club points out that the crossing is on National Cycle Network Route 51 and suggests that a subway would be more convenient for cyclists [6.46.3].
- 9.7.19 For the reasons given by Chiltern [8.14.12], I am satisfied that it would

not be practicable to provide a subway here in lieu of the crossing or proposed bridge. There was no evidence of any arrangement to reconcile the current location of a cycle route along the footpath, but in any event the proposed ramps would allow bicycles to be wheeled over the proposed bridge.

- 9.7.20 A public right of way would be extinguished at the level crossing, and it seems to me that the Secretary of State would have reason to be satisfied that an alternative right of way would be provided.
- 9.7.21 **Langford Lane** is a public road and a cul de sac, with a bridleway through route. It would be severed by the proposed closure of Langford Lane level crossing. Work No. 11 (as proposed by Chiltern to be amended) would provide an alternative crossing of the railway. Because the level crossing is within the Alchester Roman Town Site Scheduled Monument, Scheduled Monument Consent has been sought for the turning bays in the road and other works that would be necessary if the level crossing was closed, and the application was successful [4.11.20].
- 9.7.22 Following publication of the draft Order, and in the light of representations received, the proposed alignment of Work No. 11 to the west of the railway near the Alchester Roman Town site was modified in order to avoid harm that would otherwise be caused by the published proposals to the setting of the Roman Town site, and potential harm to archaeological remains. The revised proposal was subject to environmental assessment [4.5.12].
- 9.7.23 Langford Lane provides the only means of access to a number of properties to the east of the railway (Alchester House, Wendlebury Gate Stables, Merton Grounds Farm, the Quinn family, the Trustees of A. Deeley, Topbreed Limited and Primepark Limited). Those parties variously object to the proposed closure of Langford Lane level crossing on the grounds that the road diversion that Work No. 11 would provide would be unnecessarily long and would in their view be dangerous to use and intrusive to construct and harmful to the archaeological resource, and on other grounds; and that an identified alternative alignment ("the Orange Route") would be preferable in all those respects and enjoys the support of relevant landowners [6.55.17, 6.36.29, 6.35.4, 6.34.1, 6.32.8, 6.33.8].
- 9.7.24 Among my purposes in writing this report is to advise the Secretary of State whether the proposals submitted by the applicant for approval are acceptable. Only if there was some significant harm in the proposals that would be avoided by an alternative proposal might I suggest there to be justification for an alternative to be pursued (Document X/3, 2.47).
- 9.7.25 I therefore consider the matters that distinguish the Orange Route from the Scheme proposal for work No. 11 east of the railway. Proponents of the Orange Route consider these to be [6.35.4, 6.34.1]:
- *Removal of through traffic from Bramlow, Wendlebury Gate Stables and Alchester House.* I consider this to be a matter of very little weight: it is a matter of observation that riding stables and private houses routinely abut country lanes such as is the case here and would be with the Scheme proposal.

- *Reduced disturbance at Bramlow and Wendlebury Gate during construction.* Any disturbance would be a short-term phenomenon, and subject to the Code of Construction Practice [4.11.16]. There is no evidence that unacceptable disturbance would arise from construction of the Scheme proposal.
- *Easier field access and less agricultural land take from Elm Tree Farm.* A reduction in agricultural land take would be a benefit, but there is no evidence that the Scheme proposal would be unacceptable in this respect.
- *Better access for cyclists and equestrians to the bridleway south of Merton Grounds Farm, and reduction of the residents' security concerns.* There is no evidence that the Scheme proposal would be unacceptable in this regard. Only an average of 3 equestrians per day were surveyed to use the level crossing, during a 4-day survey in June [8.13.13]. No party brought quantified evidence of use by cyclists. No evidence was brought to support the contention that Merton Grounds Farm's security is particularly at risk, with or without the Scheme. There is no strong reason here to move away from the Scheme proposal.
- *Effect on archaeology.* English Heritage raise no objection to the archaeological effect of the Scheme proposal for Work No. 11 (with the modification to the west of the railway) [8.13.2]. Oxfordshire County Council's archaeologist considered the Scheme's effect, but no objection is raised [6.55.37b, 6.55.38]. The Scheme proposal is acceptable in this respect.
- *Effect on flood management.* The Environment Agency is aware of the Scheme and is content that all outstanding matters can be properly addressed [4.11.42 to 4.11.51]. Having considered both options, the Agency is strongly in favour of neither [6.35.5]. I find little here to lead me to the Orange Route.
- *Use of previously-developed land in the Green Belt.* The land is not in the Green Belt [4.11.21]. The Orange route would re-use as public road some 570 metres of public bridleway, also now used as a private road [6.33.9, 2.9].
- *Safety in use.* Objectors point to the alignment that the Scheme proposal would offer near Wendlebury Gate, where the through route would turn from a broadly north-easterly direction to broadly south-by-south-east. The indicative design has been approved by the local highway authority [8.13.17]. Objectors report this part of the highway to be cramped during business hours with stable traffic, parked cars, horseboxes, horses, riders and children [6.34.1] but I do not agree that the Stables' use of the highway in this way should be regarded as indicating a need to modify the Scheme proposal.
- *The possibility that deliveries or service calls might not be available because of the extra distance.* No evidence was brought to support this conjecture, to which I attribute very little weight.
- *Travel distance,* which I consider in the following paragraphs.

9.7.26 Numerous attempts were made at the Inquiry to quantify the different

travel distances associated with the Scheme proposal east of the railway, and the Orange route. If the Orange Route were superimposed on the corresponding section of the Scheme proposal, there would be the semblance of a right-angled triangle. Wendlebury Gate would be at the northernmost apex of the triangle, and the Work No. 11 bridge a little way from the westernmost point. The evidence of Topbreed Ltd and Primepark Ltd [6.33.9, 6.33.10] is that the hypotenuse (corresponding to the Scheme proposal) would be 965 metres long, the base of the triangle (corresponding to the east-west section of the Orange route) would be 804 metres long and the side of the triangle (corresponding to the broadly north-south section of the Orange route, along the existing bridleway) would be 570 metres. Therefore, traffic passing over the Work No. 11 bridge intending to visit Wendlebury Gate (or Alchester House) would travel 965 metres with the Scheme proposal, in comparison with $804 + 570 = 1374$ metres with the Orange route. For such trips, the Orange route would be 409 metres longer than the scheme. Traffic coming over the new bridge aiming to go to Merton Grounds or thereabouts would travel 804 metres with the Orange route, in comparison with $965 + 570 = 1535$ metres with the Scheme. For such trips, the Orange route would be 731 metres shorter. These findings are broadly consistent with Chiltern's assessment [8.13.9].

- 9.7.27 I note Chiltern's estimation of the distribution of trips between the two destinations I have mentioned [8.13.8] but here rely on the objectors' traffic survey results [6.35.7], which found 61 vehicles on a Saturday to go to or from Merton Fields (and 75 going north to or from Wendlebury Gate or Alchester House), and 60 on a Tuesday going to or from Merton Fields (and 66 northwards). The following table summarises the total distances travelled in each case:

Travel Distances – Effect Of The Orange Route			
	Destination		Net
	North	Merton Grounds	
Saturday			
Number of vehicles	75	61	136
Distance saved per trip by Orange route (metres)	-409	731	
Total travel distance saved (metres)	-30675	44591	13916
Net travel distance saved per trip overall (metres)			102
Tuesday			
Number of vehicles	66	60	126
Distance saved per trip by Orange route (metres)	-409	731	
Total travel distance saved (metres)	-26994	43680	16686
Net travel distance saved per trip overall (metres)			134

- 9.7.28 The evidence leads to the finding that the Orange route would, on daily average, reduce travel distances by between 102 metres and 134 metres per trip. Neither alone nor in combination with other matters raised is this sufficient, in my view, to warrant a departure from the Scheme

- proposal. I conclude that no further action need be taken in respect of the Orange route.
- 9.7.29 A public right of way would be extinguished at the Langford Lane level crossing, and it seems to me that the Secretary of State would have reason to be satisfied that an alternative right of way would be provided by Work No. 11 as proposed by Chiltern to be modified.
- 9.7.30 **Elm Tree Farm No. 1 level crossing** serves footpath FP398/6, which crosses the railway less than 200 metres from the site of the proposed Work No. 11 road bridge. The Scheme proposal would divert the footpath to the new bridge and close the crossing. The footpath route would be lengthened by 0.1 kilometres [4.11.86]. There was no objection to this proposal.
- 9.7.31 A public right of way would be extinguished at the level crossing, and it seems to me that the Secretary of State would have reason to be satisfied that an alternative right of way would be provided.
- 9.7.32 **Merton Foot level crossing** would be closed and a footbridge over the railway built in its place (Work No. 12), to carry users of footpath FP398/3 [4.5.14]. There was no objection to this proposal.
- 9.7.33 A public right of way would be extinguished at the level crossing, and it seems to me that the Secretary of State would have reason to be satisfied that an alternative right of way would be provided.
- 9.7.34 **Wendlebury Foot level crossing** serves footpath FP 398/2. It would be closed and the footpath diverted along each side of the railway so that walkers might reach and use Work No. 12. The footpath route would be lengthened by 0.69 kilometres [4.6.7, 4.11.86]. There was no objection to this proposal.
- 9.7.35 A public right of way would be extinguished at the level crossing, and it seems to me that the Secretary of State would have reason to be satisfied that an alternative right of way would be provided.
- 9.7.36 **The Beebont level crossing** allows users of bridleway BW157/4 to cross the railway. It would be closed and replaced with a bridge as part of Work No. 13, and the bridleway diverted so as to increase its length by 0.89 kilometres [4.6.7, 4.11.86]. Various parties object to this proposal because of the effect that change would have on means of access to nearby property, and the visual effect of the bridge, both of which matters I consider elsewhere. The Oxford Fieldpaths Society objects on grounds which include cultural heritage, and I consider that elsewhere in this report [9.8.84].
- 9.7.37 The Oxford Fieldpaths Society considers the existing bridleway that approaches this crossing to be charming, wide and well-grassed but expects that the diverted route would be a mud bath for much of the year, adding an extra quarter-hour to the walk [6.29.11]. But the diverted route would be hardened with the minimum amount of crushed stone, so as to avoid the mud bath effect [4.5.15d]. The new route would take longer to walk, by virtue of its extra length – a disadvantage for those in a hurry; but for others there would be the new opportunity on the diversion of an elevated viewpoint over Otmoor from the new bridge at Work No. 13 [8.14.8]. The effect of the Scheme proposal here

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- on recreational users of the public rights of way network would be acceptable.
- 9.7.38 A public right of way would be extinguished, and it seems to me that the Secretary of State would have reason to be satisfied that an alternative right of way would be provided.
- 9.7.39 **Oddington Foot level crossing** serves footpath FP 318/6. The Scheme proposal would close it and divert the route to the new road bridge over the railway that Work No. 14 would provide. The length of the public right of way would increase by 1.73 kilometres, of which some 1.1 kilometres would be close to the railway [4.6.7, 4.11.86, 6.28.7].
- 9.7.40 The Oxford Fieldpaths Society objects to this proposal on grounds which include cultural heritage, and I consider that elsewhere in this report [9.8.84]. I also consider elsewhere the objection of Mr Barbour, who uses the crossing for operational purposes, to access adjacent land [6.55.4, 9.8.97].
- 9.7.41 The evidence is that this footpath is not well-used. Chiltern's survey on four days in June 2010 found no users at all [8.14.5]. No other party brought evidence of a survey and, although objectors point to the former importance of this footpath as a route between Charlton-on-Otmoor and Weston-on-the-Green, no-one from either of those places objected to this aspect of the Scheme [6.28.5, 6.45.3d]. Although the new route alongside the railway would be less direct and less congenial than the current alignment, I am satisfied that the Scheme proposal would have a very slight effect on users of the public rights of way network. The new arrangement would, in its context, be reasonably convenient.
- 9.7.42 The Bus Users UK Oxford Group suggests that, to retain a direct route between Charlton-on-Otmoor to Weston-on-the-Green, a new link should be provided between bridleway BW157/4 and footpath FP318/6 [6.45.3d]. The Scheme offers no such proposal [8.14.10], but in the light of my findings in paragraph 9.7.41 I do not consider that to be a serious shortcoming in the Scheme.
- 9.7.43 There is no proposed Order that would be made under section 48(2) of the Transport and Works Act. A public right of way would be extinguished, and it seems to me that the Secretary of State would have reason to be satisfied that an alternative right of way would be provided.
- 9.7.44 **Yew Tree Farm level crossing** serves footpath FP318/2. The Scheme would close this crossing and divert the footpath to the new bridge that Work No. 14 would provide. The footpath length would increase by 0.71 kilometres [4.6.7, 4.11.86]. There was no objection to this proposal, the effect of which I therefore find acceptable.
- 9.7.45 A public right of way would be extinguished, and it seems to me that the Secretary of State would have reason to be satisfied that an alternative right of way would be provided.
- 9.7.46 **Oddington Road level crossing** would be closed and the road diverted approximately 150 metres to the northeast, to the new road bridge over the railway that Work No. 14 would provide [4.6.7, 4.5.16]. Ms North objects that this would greatly increase travel distances and that the gradients would be dangerous in bad weather [6.55.18]. I do not agree,
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- because the difference in journey lengths would be slight and because the bridge would be built to the standards of the DMRB [4.5.16]. There was no other objection to this proposal, and I consider the proposal to be acceptable.
- 9.7.47 A public right of way would be extinguished, and it seems to me that the Secretary of State would have reason to be satisfied that an alternative right of way would be provided.
- 9.7.48 **Islip Foot level crossing** would be closed and footpath FP318/7 diverted to the bridge that Work No. 14 would provide. The footpath route length would increase by 0.50 kilometres [4.6.7, 4.11.86]. Mr and Mrs Unwin consider that closure of this crossing would reduce the number of recreational walks near their home at Brookfurlong Farmhouse [6.55.55], but it seems to me that the extra distance involved would not be excessive. There was no other objection to this proposal, which seems to me an acceptable one.
- 9.7.49 A public right of way would be extinguished, and it seems to me that the Secretary of State would have reason to be satisfied that an alternative right of way would be provided.
- 9.7.50 **Oddington No. 5 level crossing** would be replaced with a footbridge to carry footpath 318/5 (the "Oxfordshire Way") over the railway [4.5.16, 8.14.19]. There was no objection to this proposal, which seems to me acceptable.
- 9.7.51 A public right of way would be extinguished at the level crossing, and it seems to me that the Secretary of State would have reason to be satisfied that an alternative right of way would be provided.
- 9.7.52 **Islip No. 4 level crossing** serves footpath FP260/4. It would be closed. Walkers would be diverted to the new bridge at Work No. 15. On the north-western side of the railway a new length of footway would be provided to reduce the length of the diversion, which would increase the length of the route by 0.39 kilometres [4.6.7, 4.11.86, 8.14.19]. Mr and Mrs Unwin object to this proposal and the proposed closure of the Brookfurlong Farm accommodation crossing [6.55.55], and I consider the effect on access to their property elsewhere in this report. There was no other objection to the proposed closure of Islip No. 4 level crossing.
- 9.7.53 A public right of way would be extinguished, and it seems to me that the Secretary of State would have reason to be satisfied that an alternative right of way would be provided.
- 9.7.54 **Mill Lane level crossing**, Islip, is a "miniature warning light equipped" crossing with user-operated gates. It would be closed and a bridleway bridge (part of Work No. 16) provided in place of the existing road crossing [4.11.88, 4.5.19, 4.6.7]. There are objections to the form of the bridge, and some objectors would prefer a subway. I consider those matters elsewhere.
- 9.7.55 Closure of Mill Lane to vehicular through traffic would alter nearby Mill Street into a long cul de sac, narrow in places. Objectors who raise this and the consequent access limitations consider that, on balance, the Scheme proposal is acceptable [6.26.3]. Mill Lane is not often used by large vehicles. The Oxfordshire Fire and Rescue Service has been

- consulted and offers no adverse comment [8.10.6]. Access to Mill Street is sometimes restricted by flood water, and Chiltern proposes that planning permission for the Scheme should be conditional upon resolution of that matter [8.10.5].
- 9.7.56 The changed access regime to Mill Street would, in my view, be acceptable providing that the flood issue is satisfactorily addressed; and that could be secured by planning condition.
- 9.7.57 A public right of way would be extinguished at the level crossing, and it seems to me that the Secretary of State would have reason to be satisfied that an alternative right of way would be provided insofar as would be necessary.
- 9.7.58 **Water Eaton No. 5 level crossing** serves bridleway BW229/5. It would be closed and replaced by the Work No. 17 bridge over the railway. The bridleway would be diverted and the route shortened by 0.19 kilometres [4.6.7, 4.11.86]. There was no objection to this proposal.
- 9.7.59 A public right of way would be extinguished, and it seems to me that the Secretary of State would have reason to be satisfied that an alternative right of way would be provided.
- 9.7.60 **Gosford and Water Eaton No. 4 level crossing** allows users of footpath FP229/4 to cross the railway. It is proposed to be closed and pedestrians diverted along an existing footway at the side of the A4165 (with its bridge over the railway and over the A34) and a new footpath alongside the A34 road. This would lengthen the route by 0.15 kilometres [4.6.7, 4.11.86]. FP229/4 is currently little-used here because it currently crosses the very busy A34 dual carriageway road at-grade [6.28.2].
- 9.7.61 Objectors believe the noise and other unwanted side-effects of traffic on these two main roads would make use of the diversion route unacceptably unpleasant and argue instead for a different diversion, connecting to bridleway BW229/5 and Work No. 17 [6.28.3]. Chiltern report that the majority of their 30 consultees during the Scheme design felt that the Scheme proposal would give better and more direct access to the new Water Eaton Parkway station, while the proposed diversion of Bridleway BW229/5 would cater for those who seek a quiet recreational route [8.14.1].
- 9.7.62 It is clear to me that the current route of FP229/4 is such as to seriously impede its use, by virtue of the at-grade crossing of the A34, and that the Scheme proposal would remove that impediment to the benefit of users of the public rights of way network. No assessment is provided of the relative length of the suggested alternative, but it seems to me that it would be somewhat longer (from the junction of bridleway BW229/5 and Water Eaton Lane to the current conjunction of footpath FP229/4 and the A4165) than either the current route or the Scheme proposal. I am not satisfied that the suggested alternative would further increase the utility of the diverted footpath. Since recreational use would continue to be served by the diverted bridleway BW229/5, I am satisfied that the Scheme proposal would be satisfactory and need not be changed.

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- 9.7.63 A public right of way would be extinguished, and it seems to me that the Secretary of State would have reason to be satisfied that an alternative right of way would be provided.
- 9.7.64 **Gosford and Water Eaton No. 10 level crossing** serves footpath FP229/10. It would be replaced by a footbridge at the same site (Work No. 18) [4.5.24, 4.6.7]. There is no objection to this proposal.
- 9.7.65 A public right of way would be extinguished at the footbridge, and it seems to me that the Secretary of State would have reason to be satisfied that an alternative right of way would be provided.
- 9.7.66 **Level Crossings: Overall** – I have considered here the effects that the Scheme proposals for level crossing closures would have on users of the public rights of way network. I consider elsewhere the Scheme effects on parties who rely for access to property in which they have an interest on level crossings that the Scheme would close. I am satisfied that the Scheme proposals would have no unacceptable effect on users of the public rights of way network.
- 9.7.67 **Footpath FP129/3, Bicester** crosses the route of the Chord, which would be a new railway. The footpath would be diverted to accommodate the new footbridge over the railway that Work No. 8 would provide [4.5.6]. Two objectors argue that a subway should be provided instead, on grounds of relative ease of use, and overlooking of approved residential development to the south [6.42.2, 6.55.80]. But the subway floor would be lower than the water table, resulting in high maintenance costs, and subways in peri-urban areas such as this often present a perceived threat to personal security. The footpath is not made up and often unsuitable for use by people with mobility difficulties. [8.14.14, 8.14.15]. A narrow subway beneath the London to Birmingham main line (which is at a higher level than the Chord at Work No. 8) constrains access along the footpath with maintenance equipment such as Mr & Mrs West suggest [6.42.3]. An alternative right of way would be provided over the bridge, and I find the Scheme proposal with regard to Work No. 8 to be satisfactory.
- 9.8 **SM5 The likely impact on local residents, businesses and the environment of constructing and operating the Scheme, including:**
- a) **Noise and vibration;**
 - b) **Impacts on air quality;**
 - c) **Impacts on water resources and the risk of flooding;**
 - d) **Impacts on landscape and visual amenity;**
 - e) **Impacts on cultural heritage and archaeological remains, including the settings of scheduled ancient monuments;**
 - f) **Impacts on land use, including effects on commercial property and agricultural land use and on rights of access; and,**
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g) The effects of the Scheme on open space, and Chiltern Railways' proposals for providing replacement open space having regard to PPG17: Planning for Open Space, Sport and Recreation.

a) Noise and Vibration

Construction Noise

- 9.8.1 Chiltern proposes to regulate construction noise by the means set out in the Code of Construction Practice Revision Two: Draft (CD/1.24) ("the draft Code") to the levels set out in that document or as agreed with the local authority through section 61 of the Control of Pollution Act 1974 [4.8.6 to 4.8.9].
- 9.8.2 Some objectors [6.8.4, 6.32.4, 6.43.8] consider that construction noise would cause significant disturbance to residents, and pupils in schools.
- 9.8.3 I note that the daytime and evening recommendations of the draft Code are set within the ranges identified by table E1 of British Standard 5228 ("BS 5228") but are set at a uniform level whereas BS5228 recognises the noise context, setting lower thresholds for areas with lower ambient noise levels and higher thresholds in noisier places [4.8.1]. The context is important and it seems to me that it should figure in the assessment in the way recommended by BS5228.
- 9.8.4 I note too that the night-time default noise limit is proposed in the draft Code to be set at 55 dB $L_{Aeq}(1 \text{ hour})$ whereas BS5228 table E1 countenances a range of night-time noise thresholds, from 45 to 55 dB over the 8-hour period. There is not necessarily a tension between the two but, to ensure that residents in quieter locations do not inadvertently experience many consecutive hours of inappropriately loud noise, the construction noise limits should recognise the context.
- 9.8.5 BS 5228 table E1 makes no provision for offices or schools. Chiltern considers the threshold for offices during the daytime to be the same as for dwellings, and that for schools during the daytime to be 5 dB lower than for dwellings [4.8.4]. I find no reason to differ.
- 9.8.6 Providing the changes I have identified are introduced to the construction noise control regime (Condition 18 in Appendix 1), I am satisfied that acceptable noise conditions would prevail while the Scheme was under construction.

Operational Noise

- 9.8.7 I consider this matter with regard to the following:
- The calculation of noise levels associated with the passing of trains along the Scheme.
 - The interpretation of the calculated noise levels with regard to their effect on living conditions along the route.
 - The likely effectiveness of the proposed mitigation measures.
 - Understanding of the specific mitigation measures that would be provided.

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- Other matters.
- 9.8.8 **Calculation of noise** – Noise from the operation of the railway has been predicted by Chiltern using the Calculation of Railway Noise (“CRN”) procedure developed by the Department for Transport [4.8.19]. Although some find illogical the use of the Equivalent Continuous Sound Level (L_{Aeq}) statistic, rather than the instantaneous peak noise [6.20.5], the use of L_{Aeq} is required by the Department for Transport and by Statutory Instrument [4.8.19] and has been provided by Chiltern. I am satisfied that an appropriate measure of noise has been used as the basis of the assessment.
- 9.8.9 Baseline noise levels have been measured in accordance with good practice, and the lowest levels have been reported to ensure robustness in the analysis. This seems to me consistent with the difference, noted by an objector, between the strategic DEFRA model of road noise and the reported findings from the field [4.8.1, 6.20.4, 8.3.12u), 4.8.2].
- 9.8.10 It is argued that trains in the future might have different characteristics from those modelled: they might travel faster and thus make more noise [6.20.15]. I am satisfied that the use of CRN is appropriate in this case and there was no contention that it had been applied wrongly.
- 9.8.11 **Interpretation** - Predicted noise levels with the Scheme in place would be compared with noise exposure category A (new housing), taken from PPG24 *Planning and Noise* [4.8.12], and with the “trigger” noise levels (adjusted for the façade correction) set out in the Noise Insulation (Railways and Other Guided Transport Systems) Regulations 1996 (“the Regulations”) [4.8.14]. The effect of individual peak noises at night would also be compared with a threshold set by PPG24 [4.8.17]. Objectors point to other standards, by the World Health Organisation, or inside buildings, or in other countries [6.20.8, 6.20.9, 6.20.10, 6.19.4, 6.43.14], but it seems to me that the Scheme proposal appropriately applies English guidance relating to external noise and railways.
- 9.8.12 Best Practicable Means would be used to design the railway so as to minimise the noise (and vibration) produced by its use [4.8.31b]. If, notwithstanding that, the train noise would exceed one or more of the three noise thresholds listed in the previous paragraph, then noise mitigation measures would be deployed [4.8.31c,d,e]. I am satisfied that this approach reflects the guidance of PPG24 and the Noise Insulation (Railways and Other Guided Transport Systems) Regulations 1996, and is appropriate in the circumstances.
- 9.8.13 **Effectiveness of suggested mitigation measures** - Some objectors question the effectiveness of noise barriers [6.7.2, 6.8.3, 6.21.8] while others argue for them [6.15.1, 6.27.3]. There was no reasoned dispute about the effectiveness of the other mitigation measures suggested by Chiltern. Noise barriers are widely and effectively used throughout the country and I am satisfied that they and the other mitigation measures proposed by Chiltern are capable of reducing the noise effect the Scheme would otherwise have.
- 9.8.14 The modelled residual L_{Aeq} noise impact of the Phase 2 Scheme with a noise barrier at Lakeside is 2 dB [4.8.20]. I am not persuaded that it would be necessary there or anywhere else to provide an enclosing
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- structure or above-ground tunnel, as proposed by objectors, to further reduce the noise [6.19.13]. Annex 3 of PPG24 is clear that such an approach is not necessarily effective. Furthermore, the visual impact of such a structure would be very intrusive [8.3.12]. The idea need not be pursued.
- 9.8.15 There was no evidence that any party other than Chiltern had undertaken any noise assessment calculations. "Calculation of Railway Noise", explaining the method to be used (for example with regard to the effect of noise barriers) and providing design charts and worked examples, was an Inquiry core document [4.8.19].
- 9.8.16 I therefore find nothing in the matters raised relevant to this point to change my conclusion in paragraph 9.8.13.
- 9.8.17 During and before the Inquiry, Chiltern produced various estimates of the noise effects of the Scheme [6.20.17, 8.3.4]. While some variation may be expected as a scheme is developed, it seems to me that the final proposals should be supported by evidence that the calculations behind them are sound [6.7.2]. That is a matter for a planning condition (Condition 19 in Appendix 1).
- 9.8.18 **Specific noise mitigation measures** – The outcome of the noise mitigation ought to be clearly defined. The intention is that the residual noise effects at any location would be no worse than those reported in the Environmental Statement, and I have found those targets to be satisfactory [4.8.31a, 9.8.12]. Additionally, there should be clear understanding of some matters in the final Noise and Vibration Mitigation Policy ("the Policy", CD/1.29/2) which seem to me to currently lack clarity in some respects [see also 6.20.20, first bullet]. Those matters can be addressed by planning condition. They include:
- Provision for the local planning authorities to be assured that the Policy is being applied (Condition 19, item 11, in Appendix 1).
 - Should the situation arise in which Chiltern consider "not reasonably practicable" the provision of mitigation measures that otherwise would be required by the Policy, the appropriate response to that position (Condition 19, item 12, in Appendix 1).
- 9.8.19 **Other matters** - The intermittent noise of individual passing trains is very disturbing to the work of a piano tutor, in Lakeside, who fears that the Scheme would make that worse [6.18.1 to 6.18.4]. The evidence is that mitigation in the form of a barrier could be provided that would annul any noise increase associated with the Scheme [8.3.12m]. In view of that and the circumstances described it seems to me that the noise associated with the Scheme would otherwise be unacceptable in the studio. Such mitigation should be provided, and that is a matter for a condition (Condition 19, item 4 in Appendix 1).
- 9.8.20 Paragraph 8.3.12 of this report, and its subparagraphs, set out Chiltern's responses to various points raised. It relates to the intermittent nature of train noise, records of freight trains on the line on 14 and 15 July 2010 and general freight train frequency, baseline noise levels at Lakeside, the acoustic effect of two trains passing, the presence in figures 6.1 A to Q of the Environmental Statement of indications of the likely locations of noise

barriers, mitigation at St Peter's Road and Blenheim Drive, track lowering in Wolvercot tunnel, noise levels at Wolvercote School, noise mitigation at Whimbrel Close, noise levels at Alchester Terrace, the intention to provide an acoustic barrier at Oxford station car park to protect nearby dwellings, noise changes at Elm Tree Farm, noise on land north of Gavray Drive, and the noise maps on the DEFRA website. I find nothing there or in the corresponding matters raised by objectors to alter the conclusions on noise that I would otherwise reach.

9.8.21 **Conclusion regarding Operational Noise** – I have found that:

- a) Future noise levels associated with the passing of trains along the Scheme have been calculated in a way consistent with Government guidance [9.8.8].
- b) The approach Chiltern has taken to interpretation of the estimated operational noise levels reflects the guidance of PPG24 and the Noise Insulation (Railways and Other Guided Transport Systems) Regulations 1996, and is appropriate in the circumstances [9.8.12].
- c) In qualitative terms, the noise reduction techniques proposed by Chiltern could have the effects claimed [9.8.14].
- d) Planning conditions are needed to give surety that the final estimates of the noise effects of the Scheme are reliable, that the Noise and Vibration Mitigation Policy is correctly applied, and that otherwise necessary measures that Chiltern considers not reasonably practicable are dealt with satisfactorily [9.8.18].

9.8.22 There was no contention that noise associated with the Scheme would have any ecological effect.

9.8.23 I consider elsewhere the effect that the Scheme would be likely to have on conditions at Wendlebury Gate Stables, by virtue of noise and movement of trains [9.13.10].

Overall Conclusion: Noise

9.8.24 I conclude that the effect of the Scheme (with the application of the Noise and Vibration Policy and subject to the planning conditions I have mentioned) would have an acceptable effect on local residents, businesses and the environment, by virtue of noise.

Vibration Associated With Construction

9.8.25 There was no objection to the provisions of the Code of Construction Practice Revision Two Draft (CD/1.24) ("the Construction Code") in respect of construction-related vibration. I am satisfied that the Construction Code or its equivalent, if secured by condition, would result in no more than an acceptable degree of construction-related vibration.

Operational Vibration

9.8.26 There is no dispute that vibration associated with use of the Scheme could rise to unacceptable levels, and the Noise and Vibration Mitigation Policy ("the Policy", CD/1.29/2) seeks to address that. Saved Policy ENV1 of the adopted Cherwell Local Plan says that "Development which is

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- likely to cause materially detrimental levels of ... vibration ... will not normally be permitted". Saved Policy CR.19 of the adopted Oxford Local Plan 2001-2016 says that "Planning permission will be refused for development proposals that cause unacceptable nuisance. Where such nuisance is controllable, appropriate planning conditions will be imposed." [4.11.8].
- 9.8.27 The evidence is that some residents near the railway experience vibration when a train passes (at First Turn [6.8.5], at Quadrangle House [6.11.3 to 6.11.6], at 398 Woodstock Road [6.13.3], at Stable Close [6.14.2], at Lakeside [6.20.6]). Those reports are supported by anecdotal evidence of vibration in the past at the Woodstock Road and at Lakeside [6.9.5, 6.10.2, 6.12.3]. Unsurprisingly, those reports by residents do not quantify the vibration experienced.
- 9.8.28 Residents of Quadrangle House lobbied British Rail in 1975, regarding vibration there, associated with fast heavy trains, and later that year a new continuous welded track had been laid [6.11.11]. I do not regard the current inability of Chiltern or Network Rail to locate past written complaints from residents as a reliable indicator that there is no problem with vibration now [8.3.17]. Nor am I satisfied that the proximity to the railway of some buildings with cracked walls necessarily means that those cracks result from events on the railway. But none of this takes anything away from the reports by some residents who experience vibration now, and I am satisfied that vibration is experienced in the area near the railway.
- 9.8.29 Chiltern undertook vibration measurements at the house at 55 Lakeside after publication of the Environmental Statement [8.3.15]. The results apply to freight trains on the line and to the current passenger trains (which are slower and shorter than those proposed). The results are not reported in the format recommended by BS6472 Annex A [6.20.28], and they are reported in terms of the Peak Particle Velocity vibration magnitudes (mm/s) but not as Vibration Dose Value (mm/s^{1.75}) [4.8.26]. Chiltern's Lakeside survey confirms that vibration is experienced when a train passes but adds little more that would assist.
- 9.8.30 The Noise and Vibration Mitigation Policy is intended to regulate vibration to limits established by BS6472. Those limits are identified by the BS as being such as would avoid vibration levels to such a degree that adverse comment would be probable [4.8.32, 4.8.26]. There was no reasoned objection to this and it seems to me an appropriate yardstick, and an appropriate measure of acceptability as sought by the local plan policies I have identified. Some such adverse comments were made to the Inquiry.
- 9.8.31 I therefore turn to the question of whether the evidence allows the position to be taken that, in the event that the Scheme would cause vibration to rise above acceptable levels [4.8.32, 4.8.24], suitable measures would be taken to rectify the situation. The evidence is that mitigation measures exist in the form of intrinsically low-vibration track designs [4.8.38]. Professor Korsunsky's view is that such measures could not be applied to the railway once it had been built, but must be addressed when the track is being laid [6.19.1, 6.19.8]. Although Chiltern takes a different position, saying that performance failures would
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be corrected [4.8.34], I am not persuaded that any interest would be properly served (or the requirements of the development plan satisfied [4.11.8]) by a situation in which it was newly discovered, once trains had started to use the Scheme, that additional track elements (such as a mat beneath the track or beneath the sleepers, or the provision of a concrete track bed [4.8.38]) were needed. Therefore, there should be confidence before the line came into use that the Scheme would not cause vibration to rise above acceptable levels.

- 9.8.32 To provide such confidence, Chiltern relies on vibration levels measured near the railway at Kings Sutton, where passenger trains are found, similar to those the Scheme would carry. The results are reported as Vibration Dose Values, and are within limits that would be acceptable with the Scheme [4.8.29].
- 9.8.33 It is clear to me from the evidence that train-induced ground vibration depends on the mechanical properties of the soil, the axle loads of the train, and the geometry of the track and the train [6.19.10]. If there is to be confidence that the Kings Sutton results (or results from any other site) can be transferred to the Scheme so as to provide reliable predictions there, then either the various factors for the two sites should be known to be similar enough for there to be reasoned confirmation, based on an understanding of the interaction of those factors, that the results are transferable; or the various factors at the two sites should be the same. Neither is established by the evidence. Chiltern's soil investigation consists of consulting the geological map and finding clay shown on the map at both sites. But the soil in north Oxford is known to vary locally from place to place and the form of the landscape at Lakeside is complex (the railway is on a small embankment), and those considerations detract from the work. Nor has Chiltern accounted for any of the effects of the complex train-track-soil interaction. [8.3.16, 6.9.5, 6.19.10]. I therefore find that the comparison of the Scheme with the Kings Sutton data has not been shown to be reliable.
- 9.8.34 The loading system is described as "quasi-static" [6.19.10] and train speed is not identified as a major determinant of vibration, either by Professor Korsunsky or the authors of the paper he cites, or by PPG24 Annex 3. Chiltern has undertaken vibration measurements (PPV and VDV) at four locations close to the Scheme [8.3.18]. Such an approach seems to me to avoid the need for a thorough understanding of the soil properties at the locations tested and (if the track and train geometry and axle loads, and any mitigation, in place when such measurements were taken sufficiently or robustly replicated the Scheme) would be capable of giving a sufficiently reliable view of the effect of the Scheme trains in inducing vibration at locations where such tests were undertaken.
- 9.8.35 In conclusion on this matter, it therefore seems to me that:
- a) The performance standards set out in the Noise and Vibration Mitigation Policy are an appropriate measure of acceptability in terms of vibration levels at sensitive receptors;
 - b) The comparison of the Scheme with the Kings Sutton data has not been shown to be reliable;

- c) There should be confidence before the Scheme came into use that the Scheme would not cause vibration to rise above acceptable levels; and,
- d) A planning condition should secure an arrangement whereby it would be established, in advance and to the satisfaction of the local planning authority, either through field tests at geologically and topographically comparable sites with comparable trains and track (and mitigation measures, if present at the comparator site) to those proposed, or by numerical analysis, or by a combination of both, that the vibration associated with use of the Scheme would be no more than allowed in the Noise and Vibration Mitigation Policy (Condition 19, item 10, in Appendix 1).

9.8.36 I consider elsewhere [9.10.5] the contention that vibration associated with the Scheme would harm the Oxford Meadows SAC, and conclude that it would not. No other case was put that Scheme-related vibration would have any ecological effect.

Overall Conclusion: Vibration

9.8.37 I conclude that the effect of the Scheme (with the application of the Noise and Vibration Policy and subject to the planning conditions I have mentioned) would have an acceptable effect on local residents, businesses and the environment, by virtue of vibration.

The Speed Of Trains That Would Use The Scheme

9.8.38 Representations were made that, in order to reduce the noise and/or vibration they might otherwise cause, the speed of trains using the Scheme should in places be limited (by planning condition) to, variously, 30 mph, 40 mph or 50 mph [6.9.1, 6.12.2, 6.11.8]. I do not adopt such a course, for the following reasons:

- a) No expert evidence was brought to support the views that any of the suggested speed limits would have the desired effect in the context of the Scheme, or that any one of them was necessary.
- b) Such evidence as was brought about the relationship of train speed and resulting vibration was that the ground vibration spectra produced by passing railway trains depend strongly on factors other than train speed [6.19.10].
- c) The planning conditions I propose would provide the surety I have described in respect of noise and in respect of vibration, without recourse to speed limits.
- d) The suggested condition would therefore not be necessary.

b) Air Quality

9.8.39 **During Construction** - The Code of Construction Practice, proposed to be the subject of a planning condition, would include requirements to regulate dust and air pollution associated with the works [4.11.15, 4.11.16]. I find it suitable for its intended purposes in that respect, for the reasons given later in this report [9.11.3].

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- 9.8.40 I am satisfied [9.7.1] that the volume of construction traffic would be of the order of 100 vehicles per day at any point on the road network. This would be considerably less than the threshold above which the Design Manual for Roads and Bridges considers significant changes in air quality to occur [4.11.75]. No case was put to the contrary.
- 9.8.41 I conclude that, subject to a condition requiring conformity with an approved Code of Construction Practice, construction work associated with the Scheme would have no significant adverse effect, through air quality changes, on local residents, businesses or the environment.
- 9.8.42 **In Operation** - Once in operation, the Scheme would improve local air quality insofar as it is expected to lead to reduced emissions from road transport [4.4.16]. This would be a general effect, and no case was put that it would to any material extent offset any of the more localised effects arising from operation of the Scheme.
- 9.8.43 The trains that would use the Scheme would be diesel powered [8.5.5d]. The main pollutants emitted by the trains would be nitrogen dioxide, sulphur dioxide and PM₁₀ particulates [4.11.71].
- 9.8.44 As regards the effects of these emissions on human health, objectors referred to thresholds published by the World Health Organisation, and an air quality management area throughout Oxford (although Chiltern's evidence is that, at the time of the Inquiry, Oxford's air quality management area was confined to the City centre) [6.9.6, 6.20.21, 8.4.1]. Objectors pointed to the harmful effects that long-term exposure to such emissions can have, and emphasised that a safe limit as an absolute cut off point is not a tenable concept; rather, allowable levels are chosen for economic reasons and they are points on a continuous distribution relating harm to exposure [6.21.3 to 6.21.5].
- 9.8.45 It seems to me that in England the balance is struck by the UK Air Quality Strategy [4.11.70]. The undisputed evidence is that, even if Phase 2 of the proposals came into operation, the annual mean total concentrations of the three main pollutants including background levels and emissions caused by the use of trains on the Scheme would not anywhere be greater than 60% of the Air Quality Strategy acceptability criterion, in the case of nitrogen dioxide; not greater than 55% of the corresponding criterion for PM₁₀ particulates; and not greater than 20% of the corresponding criterion for sulphur dioxide [4.11.72].
- 9.8.46 To this should be added the effect of road traffic changes caused by the Scheme. Those changes would be negligible at Oxford station and at Islip Station [4.7.14]. The main pollutants associated with road traffic emissions are nitrogen dioxide and particulate matter [4.11.73]. There was no challenge to Chiltern's use of the DMRB prediction method for road traffic related air quality changes at Water Eaton Parkway and at Station Approach, Bicester, or to their findings: which are that the road traffic effects of the Scheme would be to increase pollutant concentrations by only a small fraction of the levels accepted by the UK Air Quality Strategy, such that the resulting combined levels (due to road and rail effects of the Scheme, added to background levels) at the sites considered would remain well within those accepted levels for human health [4.11.70 to 4.11.76]. And I attribute much greater weight to
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- those reasoned findings than to unsupported concerns by individuals, however sincerely felt, to the contrary [6.13.4, 6.15.1, 6.47.3, 6.54.7, 6.55.17].
- 9.8.47 No evidence was brought to demonstrate that air quality in London Road, Bicester, would fail to meet the Air Quality Assessment Criteria as a result of standing traffic at the level crossing [6.32.5]. Air quality in nearby Station Approach is estimated by Chiltern to change by only a very small amount as a result of road traffic changes associated with the Scheme [4.11.76], and the predicted pollutant levels at the site, including the effects of the rail element of the Scheme, would be about 56% of the UK Air Quality Standards limit for PM₁₀ and NO₂ (the main pollutants associated with road traffic [8.4.6, 4.11.73]. That proportion would increase only marginally if the effect of passing road traffic associated with the Scheme were taken into account, and a substantial margin would remain. In view of those factors I am not persuaded that air quality would become unacceptable here as a result of the Scheme's rail and road traffic effects.
- 9.8.48 I conclude that the effect on local residents and businesses of operating the Scheme would be within the Air Quality Assessment Criteria set out in the UK Air Quality Strategy, and therefore acceptable.
- 9.8.49 Evidence was also given regarding the significance to ecology of air quality changes that the Scheme would cause at various designated sites. Of these, Wolvercote Meadows SSSI, Pixey and Yarnton Meads SSSI ("the two SSSIs") and the corresponding part of the Oxford Meadows Special Area of Conservation about the A34 road and so it is necessary to consider the Scheme's effect on emissions from road traffic there [8.11.5]. Airborne emissions from traffic disperse to insignificant levels within 200 metres [8.11.2] and so there is no need for analysis elsewhere of the combined effects of the Scheme's emissions from rail traffic and those from its road traffic.
- 9.8.50 At the Inquiry, Chiltern argued that the traffic modelling carried out with the Central Oxfordshire Traffic Model shows that the Scheme's impact on road traffic near the two SSSIs would be to reduce traffic volumes, that the modelled peak hour (0800-0900 and 1700-1800) flows reflect the whole day, that the Scheme would therefore reduce traffic near the two SSSIs throughout the whole day, and that therefore any road traffic-induced effects the Scheme might have on air quality at the two SSSIs would not be harmful [8.11.4]. This approach was the subject of challenge [6.54.14].
- 9.8.51 It seems to me that Chiltern's approach could be valid if the profile of traffic flows throughout the day that are associated with the Scheme was of the same form as the profile of traffic flows throughout the day on the road network as a whole. But the evidence does not lead me to the view that that is the case. It is clear that traffic flows to or from Water Eaton Parkway station would determine Scheme-related traffic flows past the two SSSIs: the evidence is that traffic changes at Oxford station would be negligible [4.7.14], that Islip station is expected to be used only by local people [4.7.4], and that the catchment area of Bicester Town lies to the north and east of Islip while that for Oxford station does not extend so far north as Wolvercote whereas the SSSIs are in the same catchment

as Water Eaton Parkway [4.4.4]. The very large majority of parking demand at Water Eaton is expected to be associated with trips to London [4.4.7] and so I expect that the large majority of vehicle trips to that site would also be made by people on their way to London. The weekday peak periods for departures from the station for London are expected to be between 0700 and 0800 and, for arrivals from London, during the hour centred on 1845 [4.4.5] or thereabouts. Therefore the Scheme's road traffic would reach its peaks at times other than when the general traffic levels on the road network are maximised. It is not shown that the modelled network peak hours reflect the whole day's traffic changes due to the Scheme. Nor are the modelled network peak hours' reductions in traffic near the two SSSIs shown to be replicated during the hours of peak Scheme-related road traffic flow. Therefore, I do not share the view that the conclusion of the assessment presented at the Inquiry is robust. It is possible, on this basis, that both road and rail transport associated with the Scheme might have an effect on the two SSSIs.

9.8.52 That is not to say that the assessment of the emissions associated with the Scheme's road traffic presented in the Environmental Statement should be disregarded. This uses the standard method of the Design Manual for Roads and Bridges and relies on annual average daily traffic (AADT) flows, rather than peak hours. Thus the difficulty explored in paragraph 9.8.51 does not arise. The analysis finds that NO_x emissions from Scheme-related traffic would arise in this area in amounts likely to have any effect at all only at the entrance to the Water Eaton site, where annual mean nitrogen dioxide levels would increase by 0.36 micrograms per cubic metre [4.11.71 to 4.11.77]. The Environmental Statement provides a method for the calculation of nutrient nitrogen deposition on grassland [4.11.78] which, when applied at the Water Eaton site entrance, results in an estimated deposition rate of 0.36 x 0.0015 x 96, that is, 0.05184 kilograms per hectare per year.

9.8.53 It seems to me quite likely that Scheme-related road traffic flows (AADT) would be less near the two SSSIs than at the Water Eaton site entrance, because the traffic will disperse itself into the network. But there was no evidence of the resulting estimated Scheme-related AADT flows. Having identified that traffic flows to/from Water Eaton station would determine flows past the two SSSIs [9.8.51], one might make the assumption for this assessment that all of the Scheme-related traffic at Water Eaton would also pass the two SSSIs (which seems to me an improbably large proportion as it ignores the effects of, for example, trip ends in Kidlington and north Oxford), in which case the effects on those parts of the two SSSIs within 5 metres of the road would be as follows (and less at locations in the SSSIs further from the road) [4.11.77]:

NO _x and Deposited Nitrogen at Stated Sites, With Scheme and Assumption Stated in Paragraph 9.8.53						
Site	NO _x (µg/m ³) Annual mean			Deposited Nitrogen (kg/Ha/yr)		
	Road (as NO ₂)	Rail (Phase2)	Total	Road	Rail (Phase2)	Total
Wolvercote	0.36	1	22.86	0.05	0.14	20.45

Meadows SSSI						
Pixey & Yarnton Meads SSSI	0.36	1	23.36	0.05	0.14	20.05
Note: "Road" (or "Rail") = effect of Scheme-related road (or rail) traffic.						

9.8.54 As the Oxford Meadows Special Area of Conservation is the subject of Matter 8 in the Secretary of State's Statement of Matters, this report considers the effect on the SAC elsewhere and attention here is drawn to effects on the qualifying interests at the sites of special scientific interest.

- a) Sulphur dioxide impacts of the operation of the Scheme would not be significant at any of the SSSIs [4.11.80b].
- b) Acid deposition would change only by insignificant amounts at all SSSIs near the Scheme other than at Wendlebury Meads and Mansmoor Closes SSSI, where the baseline level already exceeds the critical load [4.11.80c].
- c) Nitrogen oxides (NO_x) concentration would change to a degree at various SSSIs (Port Meadow with Wolvercote Common and Green SSSI, Hook Meadow and Trap Grounds SSSI and Wendlebury Meads and Mansmoor Closes SSSI) where the Environmental Statement recommended that monitoring and mitigation schemes should be introduced on a precautionary basis, secured by condition, and Natural England remains of that view; but, for the reason given, Chiltern now considers such an approach impractical at the Port Meadow with Wolvercote Common and Green SSSI and so no longer suggests such a planning condition [6.55.70, 4.9.17]. It seems to me that such a condition at any SSSI would only be necessary in the circumstances described in paragraph 8 of PPS9 *Biodiversity and Geological Conservation*, that is, where there is otherwise likely to be an adverse effect on the Site's notified special interest features. In evaluating whether or not that is the case at each SSSI, I have considered the evidence given of the likely effect of the Scheme on those features; the numerical thresholds are not the only test [4.9.12].
- d) Some parts of the Port Meadow with Wolvercote Common and Green SSSI are in poor condition due variously to lack of management and to reseeding and disturbance. Those parts of the SSSI that are not in poor condition are protected by grazing and flooding from invasive plants that may tolerate high levels of nutrient, and I note that the levels of nitrogen deposited would be at the low end of the critical load range. The evidence is that NO_x emissions from the Scheme would have no discernible effect on the Port Meadow with Wolvercote Common and Green SSSI [8.11.14c) and d), 8.11.15 to 8.11.18]. Natural England argues that a precautionary approach should be taken, in accordance with the Habitats Regulations [6.55.69e)], but I consider elsewhere the Scheme's effects on the qualifying interests of the European site with which this SSSI is, in part, co-terminous. I apply the

test of paragraph 8 of PPS9, in which the term “likely” seems to me to have its everyday meaning, and I conclude that the Scheme is not likely to have an adverse effect on the notified special interest features of this SSSI.

- e) Although the Hook Meadow and Trap Ground SSSI abuts the railway, the SSSI’s areas of favourable habitat are not close to the railway and so the effect on them of NO_x from the Scheme would be diminished (but not below the critical range) by distance. The main areas on which nitrogen from the Scheme would impinge are poorly managed and have been flooded, but their current poor state is not principally a result of emitted nitrogen [8.11.19, 6.55.70]. The Scheme is estimated to increase the load of deposited nitrogen throughout the site and I find no consideration relevant to the SSSI’s qualifying interest that offsets that potential harm. Therefore, I do not find that an adverse effect on the site’s notified special interest features would not be likely as a result of the Scheme. A condition is therefore necessary to secure monitoring of the site and, if necessary, mitigation measures (Condition 34) and, with that, I am satisfied that the Scheme would not be likely to have an adverse effect on the notified special interest features of this SSSI.
- f) At the Wendlebury Meads and Mansmoor Closes SSSI, Natural England considers nitrogen levels to be already high enough to require intervention [6.55.70]. Acid deposition also exceeds the numerical critical load [4.11.80]. However, in those circumstances, fields in the SSSI closest to the railway are in good condition [8.11.21] and Natural England reported the site to be in favourable condition in August 2010 [4.9.22]. There is no contention that the acid deposition associated with the Scheme would be harmful [6.51.10, 6.55.70]. The additional nitrogen deposition rate would be relatively small in comparison with the critical load for this habitat [4.9.24]. It is not likely that an adverse effect on the site’s notified special interest features would result from emissions from the Scheme.
- g) At Pixey and Yarnton Meads SSSI and at Wolvercote Meadows SSSI, the annual mean nutrient nitrogen deposition would be probably a little less than 20.05 kg/ha/yr at the first and 20.45 kg/ha/yr at the latter [9.8.53]. These lowland hay meadows share the nitrogen-rich circumstances and favourable condition mentioned in paragraph f) [4.9.14]. I conclude that the Scheme is not likely to have an adverse effect on the notified special interest features of this SSSI.

- 9.8.55 No other matter was raised in respect of the air quality effect of the operation of the Scheme on ecology. I am satisfied that, subject to the conditions I have mentioned, such effect would be acceptable in respect of the matters I have considered here. I consider the effect on the Oxford Meadows Special Area of Conservation, elsewhere in this report [section 9.10].

c) Water Resources And The Risk Of Flooding

- 9.8.56 The Code of Construction Practice Revision Two Draft includes provision for the management of ground water during the works. I conclude on the draft Code elsewhere in this report [9.11.3].
- 9.8.57 With regard to the permanent effects of the Scheme, all aspects of the flood risk and water management assessment work undertaken by the time of the Inquiry had been progressed using the latest available hydrological modelling approved by the Environment Agency and local authorities and in accordance with current water policy. Appropriate tests have been passed to the satisfaction of the Environment Agency and local authorities. A Level 2 Flood Risk Assessment has been prepared and updated in response to comments from the Environment Agency. Chiltern proposes a planning condition to secure a Level 3 Flood Risk Assessment. Flood mitigation measures can be accommodated within the limits of deviation. The scope of detailed further work has been established in consultation with the Environment Agency, and would be fully progressed as the detailed design emerges. The Environment Agency confirmed by note dated 23 September 2010 that all matters then outstanding could be dealt with through the Protective Provisions in the draft Order and by planning condition [4.11.42 to 4.11.51, 6.55.78].
- 9.8.58 The works proposed on Port Meadow would maintain hydrological conditions there [8.11.8]. Access to Mill Street, Islip, would not be altered until a scheme for safe access and egress at times of flood had been approved by the local planning authority (Condition 14 in Appendix 1) [8.10.5]. Chiltern does not intend to de-water either Castle Mill Stream or Rewley Abbey Stream, and so British Waterways Board's concern that to do so would lead to flooding is met [8.21.8, 6.55.52d]. Gosford and Water Eaton Parish Council is not satisfied by the flood risk assessment so far carried out [6.55.11], but the work is incomplete and I am conscious of the view of the Environment Agency.
- 9.8.59 In the light of the foregoing and all other matters raised that relate to water resources and flooding, I am satisfied that the Scheme would have no harmful effect on local residents, businesses or the environment by virtue of its effects on water resources and the risk of flooding.

d) Landscape And Visual Amenity

- 9.8.60 No part of the Scheme is in an area designated for the quality of its landscape [4.11.52].
- 9.8.61 Buildings at the four stations in the Scheme, the bridges, buildings of more than 25 square metres footprint, the access road to the new aggregates depot and buildings and plant there, boundary fencing and landscaping were proposed by Chiltern to be reserved matters [4.11.94] and that is appropriate. There is a design and access statement, the most recent version of which provides illustrative designs [4.11.56].
- 9.8.62 The Scheme would very largely inhabit the existing railway corridor and there was no objection to the visual effect of the railway element that would break new ground – the Chord, which would remain close to the railway and, in my view, be comfortable in its context.
- 9.8.63 Objectors referred to various individual elements of the Scheme.

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- 9.8.64 Cherwell District Council is concerned at the possible visual effect of Tubbs Lane bridge [6.55.86b]. The layout, scale, appearance and facing materials of the bridge and the associated landscaping, as reserved matters, would be subject to their approval. Chiltern expects an adverse visual effect for residents here [4.11.54], and I note that harm.
- 9.8.65 The Deeley and Calcutt Trustees are concerned by the Scheme's effect on the setting of Alchester Terrace [6.32.6], and I note that localised harm.
- 9.8.66 At Langford Lane, the visual changes would be slight: the level crossing would be closed, turning bays provided in the road and perhaps a noise barrier provided [6.36.8]. The visual effect of those changes would depend in large part on the form and appearance of the noise barrier (and that should be subject to approval by the local planning authorities throughout the Scheme [6.5.2] (Condition 19, item 13, in Appendix 1)) but in any event, as I saw during my site visits [2.9], there is a high hedge between Alchester House [6.55.17] and the railway and so the visual effect there of a noise barrier of the common type would be very slight and, in my view, cause no significant harm. Nor would the visual character of the open country to the west of the railway [6.55.10] be noticeably changed.
- 9.8.67 Modest bridges to allow passage by vehicles over railways such as is intended at Work No. 13 are common features in the countryside and, in view of the proposed reserved matters, I do not accept that the visual amenity of Holts Farm House, some distance away, would be harmed [6.55.45, 8.12.8].
- 9.8.68 A landscaping scheme would be provided to screen the proposed bridleway bridge at Mill Lane, Islip from the general view. Nevertheless, Chiltern expects an adverse visual effect for residents here [4.11.54] and that view is shared, or emphasised, by objectors [6.23.4, 6.24.1, 6.25.1, 6.55.35] – some of whom argued for a subway instead. Notwithstanding that, a petition was submitted in support of a bridge [6.55.14].
- 9.8.69 I have found that the level crossing may be closed, subject to a condition [9.7.56]. The local highway authority has asked that it is replaced for bridleway use [4.11.88] and, although some argue that provision for equestrians is not necessary it seems to me that that would make little difference to the visual effect of the replacement structure – a bridge would still need to go high enough to clear the trains, and would need wheelchair-friendly ramps, as are proposed. I accept the arguments that a subway would have a very intrusive effect in Mill Lane (whereas the bridge could, to a large extent, be screened by mature planting) and on Kareol, the former crossing keeper's cottage (whereas the bridge would be much further away [8.10.2]); and that its drainage would necessarily be pumped [8.10.4], with a resulting lack of reliability in the long run. Other traits, such as the propensity to attract antisocial behaviour and the other matters mentioned, seem to me to be shared broadly equally by the two options. The bridge design would be a reserved matter, and subject to the approval of Cherwell District Council [6.55.86a]. I note the suggested planning conditions to protect The Grange [6.25.6].
- 9.8.70 I conclude that the Mill Lane bridge would be less harmful than the
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subway, and so is to be preferred. Nevertheless, the bridge would be visually harmful.

- 9.8.71 The site of Water Eaton Parkway Station and the proposed aggregates depot is characterised by a grain silo, railway, major roads, a park and ride site and open country [4.11.57, 4.11.58]. Objectors draw attention to the proposed car park decking, which would be provided to accommodate parking demand expected to arise if East West Rail were implemented [6.40.4, 4.4.9] and I agree that such a structure could look out of place if widely visible in the countryside. But it is clear to me from the photomontages that the parking deck [4.11.57], in effect a long single-storey building with car parking on the roof, could be screened to a degree by planting such as is proposed in general terms and such as would be secured in detail by condition. The overall effect on the landscape, with the removal of the grain silo, would be neutral. Objectors also argue that elements of the proposal would not be appropriate development in the Green Belt [6.41.5], and I consider Green Belt matters elsewhere.
- 9.8.72 As well as those which are general throughout the Scheme, conditions are proposed to secure at Water Eaton Parkway the final form of the buildings, the landscaping and screening, and details at the aggregates depot. I am satisfied that the Scheme proposals for Water Eaton Parkway Station and the replacement aggregates depot, subject to those conditions, would not harm the visual quality of the landscape.
- 9.8.73 British Waterways Board points out that the railway bridge over the Oxford Canal is visually appealing [6.55.52b]. Chiltern replies that no strengthening works would be needed to that bridge [8.21.7], and so I conclude that no significant visual harm would arise there. A resident of Stable Close, near Oxford station, anticipates loss of light as a result of the station alterations [6.14.4]; but nothing in the illustrative designs produced so far confirms that worry, Chiltern do not expect it to arise [8.21.1] and I find no reason to suppose that a detailed design that had a serious effect in that regard would be approved by Oxford City Council.
- 9.8.74 At night, lighting on the Scheme would be limited to stations, tunnels and perhaps the Mill Lane bridge. Such installations would be designed to avoid light spill and, notwithstanding the concern of Mr SurrIDGE, I am satisfied that no harm need arise. A planning condition is recommended. [8.21.2, 8.10.2, 6.6.1]
- 9.8.75 I consider elsewhere the effects the Scheme would have on the settings of heritage assets [9.8.77 and the subsequent paragraphs].
- 9.8.76 I find that the likely impact on local residents, businesses and the environment of constructing and operating the Scheme, with the conditions and reserved matters I have mentioned, with particular regard to effects on landscape and visual amenity would be to cause no significant harm, apart from the bridges proposed at Tubbs Lane and Mill Lane and the change at Alchester Terrace, where localised adverse visual effects would occur.

e) *Impacts on cultural heritage and archaeological remains, including the settings of scheduled ancient monuments*

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- 9.8.77 At Islip, Work No. 16 would have a “moderate to minor” adverse effect on the setting of the Conservation Area (ranking 3 on a scale in which 6 represents the greatest harm) [4.11.61]. Although it would occupy only 11% of the field in which it would be sited and could be screened to a degree as planting matures, it would figure in a “positive vista” from within the Conservation Area, identified in the Conservation Area Appraisal [8.10.2, 4.11.60, 6.23.6]. The new bridge would necessarily be a large structure, out of place in the context. The effect of the Scheme on the setting of the Conservation Area would be harmful.
- 9.8.78 The Central Oxford Conservation Area would have limited views of redevelopment at the Station, the effect of which would be likely to be visually beneficial [4.11.61]. The appearance of those buildings would depend in large part on their detailed design, a reserved matter, and the effect of the Scheme on the setting of the Conservation Area need not be harmful.
- 9.8.79 Chiltern’s view that the Scheme would have no adverse effect on the Bicester Conservation Area or the Wolvercote Conservation Area was not disputed and I conclude that there would be no harm there [4.11.61].
- 9.8.80 As to Listed Buildings, the settings of 6 Grade II Listed Buildings would be harmed with, in five cases, “minor” significance (ranking 2 on a scale in which 6 is the greatest) and, at Islip Mill, “minor to moderate” significance (ranking 3) [4.11.62].
- 9.8.81 The Scheme would incorporate (by condition) measures to improve the setting of the swing bridge near Oxford station, which could mitigate the effect the Scheme would otherwise have on the setting of that scheduled monument [4.5.34] (Condition 10 in Appendix 1).
- 9.8.82 Chiltern proposes that Work No. 11 should be modified from the Order Scheme so as to avoid harm to the setting of the Alchester Roman town site and potentially affecting archaeological remains, and the revised alignment of Work No. 11 would cause no harm to that scheduled monument or its setting [4.5.12]. No objection was raised to this proposed modification, and Oxfordshire County Council’s previous objection to the Order proposal would be addressed [6.55.37]. In my view, the proposed scheme modification shown by Figure 1.1 of document CD/1.22/1 is a necessary measure to avoid harm to the Alchester Roman town scheduled monument.
- 9.8.83 The Environmental Statement identifies harm that the Scheme would cause to various non-designated cultural heritage and archaeological sites, including 26 Important Hedgerows, six railway bridges and viaducts, the grain silo at Water Eaton, and five identified archaeological sites or groups of sites [4.11.65, 4.11.66]. Much of this harm could be mitigated, and such measures should be secured by condition (Condition 9 in Appendix 1).
- 9.8.84 Additionally, it is argued that Oddington Footpath FP318/6 and the Beebont Bridleway BW157/4 should be preserved on their current routes by virtue of their importance to cultural heritage [6.29.5 to 6.29.8]. Neither has any designated status, other than as a public right of way (and therefore within the blanket observation of DEFRA Circular 1/09 about the heritage importance of all public rights of way [6.29.12a]).
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Nor was evidence brought to the effect that either had been identified as a heritage asset by the local planning authority during any decision-making process or through the plan-making process or by local listing. But the local historic significance of these rights of way was explained and, even though the character of the historic landscape would be preserved and remain in large part available to the public (with the opening up of new views from the proposed bridges) [8.14.8], it seems to me that the severance of these two historic routes would have a negative effect on the cultural heritage of the area. That should weigh in the balance in the same way as should the Scheme's other effects on non-designated assets identified in the Environmental Statement.

- 9.8.85 The evidence is that, cumulatively, the overall adverse effect of the Scheme on cultural heritage and archaeology would be "slight to moderate", the fourth rank in the DMRB's eight-point scale [4.11.68]; and I find no reason to differ from that.

f) *Impacts On Land Use, Including Effects On Commercial Property And Agricultural Land Use And On Rights Of Access*

Effects On Commercial Property

- 9.8.86 Property currently in commercial use would be affected by the Scheme at Station Approach and Talisman Road, Bicester, and at the site of the proposed Water Eaton Parkway station. The Scheme would also affect land on which planning permission for commercial property has been granted (the proposed material recovery facility at Water Eaton), and land on which planning permission for residential development has been granted (at Gavray Drive) or is being sought (at London Road, Bicester) or has lapsed (at Launton Road, Bicester); and I consider those matters elsewhere [9.8.98 to 9.8.110].
- 9.8.87 At Station Approach, Bicester, part of the McKay Trading Estate and other employment land amounting to a total of seven industrial buildings would be acquired for the Scheme for redevelopment for access to the redeveloped station and for car parking [4.5.8]. That proposed compulsory acquisition gives rise to two objections: from the Bicester Bodyshop, who queried the need for acquisition of part of their site, and from Plumbase, who anticipate the loss of four jobs at the site should they need to relocate [6.55.31, 6.55.36]. There was no contention that relocation of businesses from this site would be particularly problematic. Some objectors who are employers here are concerned about the effects of the Scheme for access to their premises [for example, 6.55.9] but I note the provision of the draft Code of Construction Practice that access to affected premises should be maintained during construction of the Scheme, and the final layout would be a reserved matter [4.11.16, 4.11.94]. There was no sustained objection to the illustrative layout shown in the Revised Design and Access Statement, and I am satisfied that appropriate access to the industrial premises at Station Approach can be maintained. The Scheme's effect on commercial property at Station Approach would be acceptable.
- 9.8.88 There is no objection from any commercial interest in Talisman Road to the proposed temporary works access site that the Scheme would

introduce, and so I find that the Scheme's effect on those businesses would be acceptable.

- 9.8.89 The proposed Water Eaton Parkway station would occupy the current site of the Banbury Road freight sidings and the associated aggregates depot, for both of which the Scheme would provide replacements [4.5.21]. I consider elsewhere the effects of those proposals on the landscape and in the Green Belt [9.8.72, 9.14.4]. In operational terms, I am satisfied that this long-established rail facility is important to the minerals industry in the area, particularly for the importing of limestone, and that the loss of a facility here would be harmful and contrary to Government policy and contrary to the adopted Oxfordshire Minerals and Waste Local Plan [6.55.23 to 6.55.29]. The proposed replacement is therefore necessary. Providing that the replacement railway facilities were of a suitable size [6.55.87] (and that should be the subject of a condition (condition 5 item (o) in Appendix 1), I am satisfied that no harm need arise to this operational interest.

- 9.8.90 Overall, and subject to the conditions I have identified, the Scheme need not harm the established commercial use of property.

Effects On Agricultural Land Use

- 9.8.91 Some 15.19 hectares of the best and most versatile agricultural land would be permanently taken for the Scheme [4.11.5b].
- 9.8.92 Additional land would be temporarily occupied during construction of the Scheme, and the reinstatement of that, through the proposed Code of Construction Practice, would be the subject of a planning condition. Compensation may be payable where loss arises as a result [9.11.3, 6.31.1, 8.18.7]. It seems to me that these would be appropriate arrangements.

Effects On Rights Of Access

- 9.8.93 The Scheme would affect private rights of access through the proposed closure of accommodation crossings. The draft Order (CD/1.2.2) identifies, in Schedule 9, the accommodation crossings which would be extinguished for which a substitute would be provided, and the accommodation crossings which would be extinguished and for which no substitute would be provided. In some cases, the proposed closure of an accommodation crossing is the subject of objections that the resulting situation would be unsatisfactory. Section 5(6) of the Transport and Works Act allows that no public right of way should be extinguished by an Order made under section 1 of that Act unless an alternative right of way has been or will be provided, or unless the provision of an alternative right of way is not required; and Article 17 of the draft Order would establish that any person who suffers loss by the extinguishment of any private right of way under that Article shall be entitled to compensation to be determined, in case of dispute, under Part 1 of the Land Compensation Act 1961.
- 9.8.94 Chiltern proposes to provide alternative access routes where necessary, and elsewhere to meet compensation costs in accordance with the compensation code [4.10.3].
- 9.8.95 The objections made in respect of accommodation crossings that would

be closed and a substitute provided related to:

- a) College Farm No. 2 Crossing, on the basis that the proposed substitute would be unduly inconvenient [6.32.10, 6.55.61 to 6.55.64]. The owner of College Farm sought in 2009 to sell his land on the east side of the railway, and now intends to continue farming it separately from his land on the western side [8.14.23]. The matter of relative convenience of use of the provided alternative would be capable of being addressed by compensation, if loss were to arise.
- b) Manor Farm Crossing, Home Farm Crossing, Holts Farm Crossing and the private rights that exist over the Beebont bridleway crossing, on the bases that the alternative provided would be inconvenient by virtue of its length [6.55.58] and quality [6.51.6, 6.55.58]. Among its other effects, the Scheme proposal would alter but not prevent access to land which is part of the Wendlebury Meadows and Mansmoor Closes SSSI, upon which access the owner of that land relies to manage its part of the SSSI [6.51.5]. Objectors propose various alternative arrangements [6.55.59 - 6.55.60] but it seems to me that the essence of the objections here could be met by compensation through Article 17 of the draft Order, if loss were to arise.
- c) Brookfurlong Farm Crossing, where the Scheme alternative is argued to be less convenient than the current arrangement [6.55.20, 6.55.56]. If loss were to arise, it would be a matter for compensation.
- d) The allotment access near Aristotle Lane, which I consider elsewhere in this report [9.13.16 to 9.13.32].

9.8.96 The objections made in respect of accommodation crossings that would be closed and no substitute provided related to:

- a) Taylor's Number 1 crossing, where an objector claimed a right of way over the railway (by letter dated 11 February 2010 from his professional agents) but provided no details of that claimed right of way, nor any explanation of why it should not be extinguished [6.55.17]. This objector was not represented at the Inquiry. In the absence of such information I do not regard as unreasonable the Scheme proposal to close the crossing and extinguish all rights of way there with no substitute.
- b) Farm Crossing and Bonners Crossing connect the same land interests as College Farm No. 2 Crossing [6.55.61], in respect of which a substitute access would be provided. No further measure is necessary in respect of Farm Crossing or Bonners Crossing.
- c) Mill Farm Crossing, where a substitute access is available between the land on either side of the railway [6.55.57, 8.14.20]. If loss were to arise, it seems to me a matter for compensation.

- d) Nesbitt's Crossing, which has not been used for many years. The owner of the adjacent land on each side of the railway has rights over the crossing and hopes in future to start exercising those rights again [6.55.1]. Alternative means of access already exist to both parcels of land [8.14.21]. In the circumstances I do not accept that the crossing should be kept in case it is needed in future, particularly as there is no evidence that use of a level crossing here would be consistent with future development.

- 9.8.97 Oddington Foot crossing provides for a public footpath to cross the railway, which I consider elsewhere [9.7.39 to 9.7.43], and also for rights claimed by Mr Barbour [6.55.4]. Land parcels 14007, 14009 and 14016 would be acquired for, among other things, the provision of accommodation access between the public road at Work No. 14 and Mr Barbour's land to the east of the railway [4.5.16]. Mr Barbour would thus retain access to his eastern land. It is also clear that any existing arrangement whereby ground water from his land passes through drains beneath the railway would be maintained, by virtue of section 5(1) of Schedule 15 of the Order. Mr Barbour need not be disadvantaged by the Scheme and, if loss were to arise, it seems to me a matter for compensation.

Effects On Development Land At Water Eaton Parkway: The Approved Material Recovery Facility

- 9.8.98 The MRF (for which planning permission was granted on 19 February 2010 [6.50.9]) and the Scheme both seek to build at the site. It seems to me that the MRF would make an important improvement to solid waste management in the area, by reducing haulage distances and by increasing the sorting and partial recovery of commercial and industrial mixed waste [6.50.3]. The current planning permission is the result of a long process, and neither Grundon nor Chiltern identified a specific alternative site for such a facility not in the Green Belt [6.50.9, 6.50.11, 8.19.16]. And there was no dispute that there is likely to be an on-going need for MRFs in Oxfordshire, although there were differences about the timing and scale of such demand [6.50.16 to 6.50.19, 8.19.17]. For these reasons I attribute substantial weight to the proposal, and to the harm that would arise if it did not proceed.
- 9.8.99 Chiltern argued for the Scheme alone and Grundon advocated co-location. In this, it seems to me that some of the points at issue were slight: while I note the absence from Grundon's proposal of taxi waiting facilities, passenger drop-off and pick-up areas and parking for motorcycles I do not accept that they could not be accommodated with Grundon's alternative proposal. And, as Grundon's proposal for a MRF on the site would cause the loss, in their unchallenged estimation, of 672 of the Scheme's proposed parking spaces I do not join the criticism that their proposal would not substitute the 1003 or more spaces Chiltern estimates the Scheme to need. The addition of 50 metres to the distance between the station and some car parking spaces is not a matter to which I attribute very great weight. [8.19.15, 6.50.13]
- 9.8.100 There would be a significant difference between the Scheme proposal and the Alternative in terms of the built form. The Scheme proposal would

remove the grain silo, relocate the aggregates depot and build a new station, two-storey car park with some 186 spaces on the upper deck, and a ground level car park and interchange [4.5.22]. The Alternative would remove the grain silo, relocate the aggregates depot and build a new station with surface car parking and interchange, a two-storey car park with some 672 (or more) spaces on the upper deck and a MRF with its 5760 square metre footprint and eaves height of 15 metres [6.50.13, 8.19.15, 6.50.11]. I have found the visual effect of the Scheme proposal to be neutral, in part by virtue of the removal of the grain silo [9.8.71]. A similar conclusion was reached by the County Council's officer, when considering the MRF proposal, which would also remove the silo [6.50.8]. But the Alternative proposal would intensify the new build at the site to a marked degree, and there would be a net harm to the landscape and visual amenity of the area as a result.

- 9.8.101 There would also be a different effect on the openness of the Green Belt. Openness would be reduced by the intensification of development that the Alternative would bring. It seems to me that, by virtue of the relative narrowness of the Green Belt here (between Oxford and Kidlington) [6.41.3] such a significant loss of openness here would reduce the effect the Green Belt has here in preventing the neighbouring settlements from merging into one another.
- 9.8.102 Paragraphs 9.14.6 to 9.14.11 of this report set out my assessment of the various considerations relating to the Scheme's effect on the Green Belt. I find there that harm associated with the Scheme proposal is clearly outweighed by other considerations. If I were to recommend that the Alternative should be pursued, I should first be satisfied that the effect of the Evergreen 3 proposal in such a context would be acceptable, and that the Alternative would be capable of realisation.
- 9.8.103 Although the Alternative proposal would take away the harm that I associate (in paragraph 9.14.7) with the Scheme proposal by virtue of the loss of an opportunity to build a MRF, other harms would arise or be intensified by the Alternative: to openness, to the landscape and, potentially and to an extent, to the prevention of coalescence of the two settlements. The absence of harm is not a benefit [9.14.8]. The Alternative is not illustrated in any detail by the material submitted in its support, although its effect on the Green Belt was the subject of representations at the Inquiry [8.19.15d]. There is no basis on which I could reliably invite the Secretary of State to conclude that the harm caused by the Alternative (that is, Evergreen 3 plus a MRF) by reason of inappropriateness and any other harm would be clearly outweighed by other considerations. Therefore, the Alternative would not be acceptable.
- 9.8.104 If the Alternative were to be realised, it would be necessary for the rearranged MRF (associated with the Alternative) to secure planning permission [8.19.13]. It seems to me that, if the Scheme application were modified to accommodate the Alternative and then approved, the circumstances of such an application would differ markedly from those which surrounded the previous application approved by the County Council and any application made in that context would not necessarily succeed.
- 9.8.105 Having considered these and all other matters raised in connection with

the proposed MRF, I conclude that the proposed Alternative should not be pursued.

Effect on Development Land at London Road, Bicester, and Langford Park Farm: Proposed Residential Development

- 9.8.106 The evidence at the Inquiry was that, although an application had been made, this site did not yet have outline planning permission for the residential development that was the subject of the objections of Mr Basson and Leda Properties [6.52.1, 6.52.2]. It seems to me that if planning permission were refused then no further action need be taken in respect of either objection.
- 9.8.107 If outline planning permission for the residential development is not refused, or if the Secretary of State takes a different view from that which I express in paragraph 9.8.106, then an effect of the Scheme proposals might be to influence the sequence of development at the London Road site. If that alteration gave rise to harm, it may be that compensation would be payable [6.52.5, 8.16.8]. In so far as the objection relates to the London Road site it relates to land parcel 04037, upon which I conclude in the context of compulsory purchase later in this report.
- 9.8.108 Plots 04a003, 04a004 and 05017 at Langford Park Farm are also the subject, in part, of the London Road planning application by virtue of the companion planning application (ref. 10/01316/F) for flood compensation works at Langford Park Farm [6.52.9]. Chiltern proposes no work here, and the Scheme would not prevent the implementation of the companion planning permission (if granted) and others have rights of way over the land which the landowner must maintain in any event [8.16.7]. These seem to me to be matters for compensation.

Effect on Development Land At Gavray Drive, Bicester

- 9.8.109 The Norman Trust and others contend that the Scheme would unnecessarily acquire more than 2 acres of land from the development site there. The land is proposed to be used for an earth slope, in the absence of which a retaining wall some 3 metres high would be needed. Chiltern expects to take less land here than the Order would allow, because of further design work since the Order was published, and resists the wall option on grounds of cost and visual harm. For the latter reason, and because the evidence is that compensation would be payable, I find no reason to modify the Order here. [6.55.79, 8.17.10, 8.17.11, 8.5.13]

Effect On Development Land At Launton Road, Bicester

- 9.8.110 Birch Sites Limited considers that temporary access that the Order would allow to the Scheme would harm their development proposal in the ways they describe [6.55.15]. There is no current planning permission for their development proposal. Chiltern suggests an access arrangement intended to meet Birch's objections [8.21.5]. I am satisfied that the objection of Birch Sites Limited could be met by compensation, should financial loss occur.

g) Open Space

General

- 9.8.111 Chiltern seeks to acquire a permanent interest in the following land which is identified by the Book of Reference as open space [4.10.2]:

Number(s)	Location
01004, 01011	West of Charbridge Lane, Bicester
02003, 02007, 03002, 03005	North of Gavray Drive, Bicester
03023	East of Tubbs Lane Crossing, Bicester

- 9.8.112 There was no contention that the Scheme would require a permanent interest in any other land said to be open space land.

Land West of Charbridge Lane, Bicester and Land North of Gavray Drive, Bicester

- 9.8.113 Here I am concerned with the Green Land as shown on the Open Space Plan (amended sheet No. 39, document CRCL/INQ/21). This is made up of parcels 01004, 01011, 02003, 02007, 03002 and 03005.
- 9.8.114 I consider first plots 01004, 01011, 02003, 02007 and 03002. Because the status of this land as open space was challenged, I refer to it here as “the Claimed Land”.
- 9.8.115 Chiltern rests its contention that the Claimed Land is open space on section 19(4) of the Acquisition of Land Act 1981, and on the evidence presented by Chiltern that the Claimed Land is used for the purposes of public recreation. Photographs are presented that, in Chiltern’s submission, clearly show informal public use on the site; although that understanding extends to only part of the site. The Claimed Land can be accessed from public footpath FP129/3, which crosses the site, and there are other points along the boundary (which is not fenced) by means of which one can enter [8.17.1, 8.17.2, 4.11.35]. Chiltern notes that the Claimed Land is not designated as open space and that there is no formal arrangement in place to maintain it as open space. The site is allocated for employment use in the adopted Cherwell Local Plan and the Cherwell Non-Statutory Local Plan. The Secretary of State has granted planning permission for residential development on this land, and that planning permission would provide large areas of amenity open space and a wildlife site; but little of that overlaps the Claimed Land [4.11.36, 4.11.37, 6.38.8].
- 9.8.116 The owners of the Claimed Land argue that the land is not open space because the land was in agricultural use and, apart from the public footpath, public access was not authorised [6.55.82]. Mrs Walker supports that and it was reported on her behalf that some entrances to the site had been closed and parcels 02003 and 02004 had been restored to agriculture [6.38.3]. Nothing I saw when I made unaccompanied and accompanied site visits before and after the Inquiry (viewing the Claimed Land from the public footpath and from Gavray Drive) persuaded me to the contrary; in November a large part had the appearance of having recently been ploughed; and in February a crop could be seen emerging.
- 9.8.117 The photographs, at least one of which was taken close to the public

footpath, show only very limited activity on the Claimed Land [6.38.6]. And I find nothing in Chiltern's evidence to support the view that parcel 01004 is open space.

- 9.8.118 It is argued for Mrs Walker that some degree of judgement should be made as to frequency of use [6.38.6]. That seems to me to be a matter of law, and open to dispute which I cannot resolve. There is no evidence of the frequency of use for the purposes of public recreation; the three people in the photographs are not identified.
- 9.8.119 Nevertheless, there is no dispute that the Claimed Land was in large part in arable agricultural use at the time of the Inquiry (which to my mind is inconsistent with public recreation), that its owners do not authorise its use for public recreation, that there is no arrangement in place to secure its use for public recreation, that the development plan identifies its planned use as industrial and that planning permission has been given for residential development there. I conclude that the Claimed Land is not open space, either for the purpose of section 19 of the Acquisition of Land Act or for the purposes of the Town and Country Planning Act 1990.
- 9.8.120 Insofar as it would affect the Claimed Land, I therefore conclude that the Scheme would have no effect on open space.
- 9.8.121 Against the contingency that the Secretaries of State reach a different conclusion in respect of the Claimed Land (namely, that it is open space that would be lost to the Scheme, and replacement open space would therefore be needed), I now consider Chiltern's proposals for providing replacement open space. The proposal is shown on the revised Open Space Plan, document CRCL/INQ/21.
- 9.8.122 Applying the requirements of Planning Policy Guidance 17 *Planning for open space, sport and recreation* ("PPG17") paragraph 13 and Appendix L of Circular 06/2004:
- a) The size of the proposed replacement land ("the Blue Land") would be more than equivalent to the Claimed Land. And the extent of the Claimed Land is now believed by Chiltern to be less than shown on the Open Space Plan in either its original or revised form [8.17.10].
 - b) Accessibility - There is no contention that the Claimed Land is widely used by the public at large, rather than those who live locally. The relative accessibility of the Blue Land would be a function, in large part, of its accessibility to those people who used the Claimed Land. Chiltern presents no direct evidence of where those people live. The bulk of the Claimed Land lies towards the western end of Gavray Drive. In the absence of any evidence to the contrary, I am not persuaded other than that, if there were users of the Claimed Land as open space, they would be much more likely to live near the western end of Gavray Drive, near Mallards Way, than they would be to live in the areas further east that are served by Heron Drive or Merganser Drive – by virtue of distance to the Claimed Land, and the availability of relatively close alternatives on the land between the Heron Drive/Merganser Drive estate and the estate served by Mallards Way [6.38.12 to 6.38.16]. I

therefore find that the Blue Land would be about 1 kilometre further away from the people most likely to use the Claimed Land, than is the Claimed Land [8.17.5]. To reach the Blue Land, it would be necessary to cross Charbridge Lane, a much busier road than Gavray Drive and with a 50 mph speed limit and no pedestrian crossing facilities at the crossing point. Chiltern argues that (because a draft Bicester Transport and Land Use Study report does not identify the site as having a high accident frequency) there would be no need for pedestrian facilities there in future, for the extra pedestrian traffic across the road that might be expected if its other hypotheses were correct. The carriageway in Charbridge Lane is outside the Scheme boundary, and the Blue Land is not adjacent to the Claimed Land. I conclude that the Blue Land would not be equally accessible when compared with the Green Land.

- c) As to usefulness as open space, the Blue Land with the proposed upgrading would be of a different character to the parts of the Claimed Land shown in evidence as illustrating use of the Claimed Land as open space. There was no dispute that the Blue Land is capable of use for the same purposes as the claimed recreational use of the Claimed Land [4.11.39].
- d) The attractiveness and quality of the Claimed Land could be matched by the Blue Land if it were subject to an upgrading scheme, as is proposed [4.11.40], and if arrangements were made for the subsequent upkeep of the Blue Land. Such arrangements have yet to be made [4.11.41].

9.8.123 I therefore conclude that the Blue Land would not meet the requirements of PPG17 or those of Appendix L of Circular 06/2004.

9.8.124 The Book of Reference shows Bicester Town Council to own plot number 03005, shown as open space land extending to 128.68 square metres. Bicester Town Council raised no objection to this or the proposed use of that land [7.1.1].

9.8.125 No evidence was brought to support the contention that Parcel 03005 is open space: nor was the contention in dispute. It seems to me that, in the absence of confirmation that the land is open space it would, in the circumstances, be right to conclude that it is not open space. However, if the Secretaries of State took a different view then the possibility would remain for Parcel 03005 to be compulsorily acquired (subject to more general conclusions). If it was concluded that parcel 03005 is open space and the Claimed Land is not, the compulsory purchase for the Scheme of 128.68 square metres of open space might be the subject of a certificate issued under section 19(1)(b) of the Acquisition of Land Act 1981, or of Special Parliamentary Procedure. In addition to my finding in paragraph 9.8.123, I would not regard as proportionate a proposal to acquire compulsorily the Blue Land (which the Open Space Plan shows to extend to 17800 square metres) in exchange for the loss of 128.68 square metres of open space land.

Land East Of Tubbs Lane Crossing, Bicester

9.8.126 This land is part of a much larger green corridor, and there is no dispute

that it is open space. It is needed for the proposed footbridge that would replace the level crossing (Work No. 9). The published "Notice of Intention" to issue an exchange land certificate (document CD/1.25a) shows that the plot extends to 204.10 square metres, and that was not disputed. Chiltern proposes that no exchange land would be provided, and that seems to me consistent with section 19(1)(b) of the Acquisition of Land Act 1981. There is no dispute that this acquisition of open space would not be noticeably harmful, and neither the local planning authority, nor Bicester Town Council (the landowner), nor any other party raises any objection to the proposed acquisition [4.11.34, 6.55.86, 7.1.1].

Open Space That Would Be Temporarily Acquired

- 9.8.127 Chiltern proposes a planning condition to secure the restoration of land used temporarily during the works and the Code of Construction Practice would require, among other things, fencing to ensure public protection, the clearance of work sites upon completion, and measures to protect ecology [4.11.93, 4.11.16].
- 9.8.128 Temporary loss of public access to parts of open spaces (at Garth Park, Bicester and at Port Meadow, Oxford [7.1.1, 8.2.14]) would, upon restoration in accordance with the Revision Two Draft Code of Construction Practice, not permanently harmful.

Summary: Open Space

- 9.8.129 I have found that the Scheme's only permanent effect on open space would be at Tubbs Lane level crossing, and that the effect there would be acceptable. There would be a temporary loss of public access to some open space elsewhere but the effects would be transient and measures are proposed to ensure they would not be severe or lasting.
- 9.9 **SM7 The likely impacts of the Scheme on flora and fauna, including whether implementation of the Scheme is likely to damage or destroy a breeding site or resting place of any species protected under the Conservation of Habitats and Species Regulations 2010 and, if so, whether appropriate mitigation measures have been designed and licences applied for by Chiltern Railways under the Conservation of Habitats and Species Regulations 2010.**
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General

- 9.9.1 Protected species that would be affected by the Scheme include bats, great crested newts, reptiles and badgers. Two Biodiversity Action Plan priority species, brown hairstreak butterfly and tassel stonewort, would also be affected. The Scheme would change conditions in some designated habitats.

Protected Species: Bats

- 9.9.2 Bats are protected species under The Conservation Of Species And Habitats Regulations 2010.

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- 9.9.3 A search along the Scheme and nearby, conducted in accordance with the English Nature Bat Mitigation Guidelines identified that bat roosts were present only at Wolvercot Tunnel ("the Tunnel"). Bats use the Tunnel for swarming, commuting, foraging and as a temporary roost site [4.9.31]. Notwithstanding the concern of Mrs Harris [6.43.12], I am satisfied that surveys of bats at the Tunnel have been conducted at all necessary times [8.11.25].
- 9.9.4 The Scheme would change conditions in the Tunnel during the construction stage, in that it would be the site of construction works to lower the floor and take up and relay the railway track [4.5.26]. Once in use, the Scheme would result in more trains passing through the Tunnel, and at higher speed than they do now [4.4.11, 4.5.25, 8.11.27]. Natural England's key concern, expressed in their written representations, is that the proposed increased speed of the trains would, at best, increase bat mortality and, at worst, render the Tunnel roosts unusable [6.55.72].
- 9.9.5 The points at issue here are:
- a) Whether the Scheme proposals would result in operation of the railway causing harm to the bats or their habitat.
 - b) Whether the Scheme proposals would be such as to require a licence issued under The Conservation Of Species And Habitats Regulations 2010 ("a Licence").
 - c) If a Licence is needed, whether an application is likely to be successful.
- 9.9.6 **Item a): Harm to bats** – There is no direct evidence that the current regime in the Tunnel causes no harm to bats. Bats have been found flying in front of the trains [8.11.27], indicating at worst that some sometimes survive and, at best, that all always survive. There is no dispute that the act of running trains more quickly through the Tunnel would increase the risk to the bats. And it seems to me that the long-term goal of dualling the track in the Tunnel would further increase that risk, since on occasion (which in view of the short time each train would be in the tunnel [8.11.28] I expect would be infrequent) two trains would pass in the tunnel, reducing the free space into which bats might otherwise move and perhaps also increasing the air turbulence [6.55.72]. But, even if Phase 2 was never implemented, it is clear that the risk of fatal accident to bats would be increased by the unmitigated scheme. And the Tunnel roosts might be rendered unusable [6.55.72].
- 9.9.7 Chiltern therefore proposes mitigation measures, intended to establish whether harm is caused to the bats in the new circumstances and, if harm is found, to use a lighting installation to sweep the tunnel clear of flying bats shortly before each train arrives and allowing them to return afterwards [8.11.30]. There was no evidence that such a system has been used successfully elsewhere: the technology does not exist and has not, in Natural England's view, been shown to be an effective mitigation method [6.55.72, 6.55.76]. Natural England suggests that a 40 mph speed limit in the Tunnel would solve the problem but Chiltern's position is that that could not be done, for the reasons given [6.55.72, 8.11.29].
- 9.9.8 Without effective mitigation, the Scheme would result in increased risk to
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the bats and their habitat, and it seems to me likely that bat deaths would become more frequent as a result. It has not been shown that the proposed mitigation (in the form of a lighting installation) would be effective in protecting the bats and their habitat from harm, were the Scheme to be implemented. If a mitigation proposal (particularly an innovative one such as is proposed here) is not known to be effective, or generally accepted to be so, there is no assurance that it would be effective. I therefore find that there is no reason to conclude other than that the Scheme (either with the proposed mitigation, or with no mitigation) would be harmful to the bats and perhaps also their habitat (in that the Tunnel would be made less congenial for bats). Such harm would be contrary to paragraph 16 of Planning Policy Statement 9 *Biodiversity and Geological Conservation*.

- 9.9.9 Applying paragraph 16 of PPS9, I have considered whether the need for the Scheme, and its benefits, clearly outweigh the harm that would be likely to arise to bats or their habitats from the Scheme without mitigation. Considered in isolation, the likely harm (to which I would attribute substantial weight) would be clearly outweighed by the need for, and benefits of, the Scheme and so to that extent the condition might not be necessary. However, PPG2 *Green Belts* requires a broader view to be taken. I am not satisfied that the harm to the Green Belt that the Scheme would cause by reason of inappropriateness, together with any other harm, including the additional burden that such harm to bats would bring and the other matters I have identified [9.14.7], would be clearly outweighed by other considerations. The overall balance of the evidence is such that a condition for the protection of bats in Wolvercot Tunnel is necessary, and construction of the Scheme should not proceed until it is satisfied.
- 9.9.10 I find no reason to conclude that there could be no acceptable mitigation. Therefore I find that appropriate mitigation has yet to be identified. It remains to be shown that the Scheme proposals with appropriate mitigation would not be harmful to the interests of the bats, and the matter should be secured by condition.
- 9.9.11 **Item b): Whether there would be a need for a Licence** – Chiltern intends to apply for a Licence in respect of construction works in the Tunnel because the works might be said to include disturbance of bats by excluding them from their roosts for a short time [8.11.31, 8.11.37]. Natural England considers that a Licence would be needed for the construction phase [6.55.74]. Both parties are of the view that a separate licence is not needed for operation of the Scheme [6.55.74, 8.11.32] but Natural England considers a Licence to be needed for the lighting scheme [6.55.76]. Chiltern does not agree [8.11.31].
- 9.9.12 Whether or not a Licence would be needed for the lighting scheme is in large part a matter of law, and the Secretaries of State will no doubt be appropriately informed. For my part, I am not persuaded that there is evidence that the proposed lighting scheme, suggested in mitigation of the effect of trains in the Tunnel, would neither damage nor destroy a breeding site or resting place used by the bats, by making the Tunnel uncongenial for bats. But, whether or not that is the case, it would remain that a Licence would be needed for the construction works in the

Tunnel.

9.9.13 **Item c): Licence Application** – The question of whether a Licence should be issued was not before the Inquiry. Natural England's evidence was that a licence application made on the basis of the information before the Inquiry seems likely to fail, because in their view sufficient information had not been provided to give Natural England certainty that the works proposed in the tunnel would not be detrimental to the maintenance of the population of bats at a favourable conservation status in their natural range [6.55.75]. I have reported Chiltern's view [8.11.25 to 8.11.46].

9.9.14 **Summary:** In respect of bats, I have found that:

- a) Implementation of the Scheme without mitigation would be likely to damage or destroy a breeding site or resting place used by bats;
- b) It remains to be shown that the Scheme proposals with appropriate mitigation would not be harmful to the interests of bats, and the matter should be secured by condition (Condition 31 in Appendix 1); and,
- c) A Licence has not been applied for but discussions have been held between the applicant and Natural England, following which Natural England considers a Licence application likely to fail.

Great Crested Newt

9.9.15 The great crested newt is a protected species under The Conservation Of Species And Habitats Regulations 2010.

9.9.16 The Scheme would remove two water bodies, each occupied by great crested newts, and some bankside newt habitat. Mitigation of that harm would be achieved by the creation of four new water bodies nearby and the enhancement of habitat. Draft detailed proposals have been made. Natural England comments that elements of the Draft may need to be amended for the purpose of obtaining a licence. [4.9.33, 4.9.34, 6.55.71]

9.9.17 In respect of great crested newts:

- a) Implementation of the Scheme without mitigation would be likely to damage or destroy breeding sites or resting places used by great crested newts;
- b) Mitigation measures have been proposed but have not been agreed with Natural England; and,
- c) A Licence has not been applied for.

9.9.18 Since the development of proposals for the conservation of great crested newts is incomplete, a planning condition is necessary (condition 32 in Appendix 1).

Reptiles

9.9.19 Reptiles that would be disturbed by the Scheme include slow worm and grass snake. Chiltern has prepared a mitigation plan and agreed it with

Natural England. Habitat would be enhanced or newly created, and reptiles relocated away from harm, either locally or to the Gavray Meadows county wildlife site [4.9.35, 4.9.36]. I am satisfied that acceptable arrangements could be made in respect of reptiles.

Badger

- 9.9.20 Setts have been identified that would be affected by the Scheme. A mitigation plan is in preparation. No licence application has been made [4.9.37]. Natural England raises no objection. I am satisfied that acceptable arrangements could be made in respect of badgers.

Brown Hairstreak Butterfly

- 9.9.21 This butterfly lays its eggs on blackthorn and is found at Gavray Drive county wildlife site. Blackthorn there would be lost to the Scheme. A planning condition is proposed, to secure compensatory actions to maintain the presence of blackthorn at the county wildlife site (Condition 30 in Appendix 1) [6.51.3, 4.11.93]. This is an appropriate response.

Tassel Stonewort

- 9.9.22 Tassel stonewort is found on bridleway BW157/4, between Mansmoor Road and the Beebont level crossing. It may be disturbed in the works. A planning condition is proposed, to assist in its conservation (Condition 29 in Appendix 1) [6.51.3, 4.11.93]. This is an appropriate response.

Nationally and Locally Designated Habitat

- 9.9.23 I consider the Scheme's effect on the **Oxford Meadows SAC** elsewhere in this report [9.10].
- 9.9.24 The Scheme would change air quality at the **Wolvercote Meadows SSSI** and the **Pixey and Yarnton Meads SSSI**. I have found that not likely to have an adverse effect on the notified special interest features of these SSSIs [9.8.54g].
- 9.9.25 The Scheme would change air quality at the **Port Meadow with Wolvercote Common and Green SSSI**, but I have found that not likely to have an adverse effect on the notified special interest features of this SSSI. [9.8.54d]
- 9.9.26 The Scheme would change air quality at the **Hook Meadow and Trap Grounds SSSI**. Subject to a condition, I am satisfied that the Scheme would not be likely to have an adverse effect on the notified special interest features of this SSSI [9.8.54e].
- 9.9.27 The Scheme would change air quality at the **Wendlebury Meads and Mansmoor Closes SSSI**. I do not find that an adverse effect on the site's notified special interest features is likely as a result of that. [9.8.54f].
- 9.9.28 This SSSI is also the subject of works proposals by Chiltern as a result of the proposed closure of nearby level crossings [4.9.23]. Objectors challenge the proposals. Here I consider the ecological effects on the SSSI, and I turn to the other matters raised, which relate essentially to access, elsewhere.
- 9.9.29 The Berkshire, Buckinghamshire and Oxfordshire Wildlife Trust says that the 675 square metres of grassland in the SSSI that would be lost to the

Scheme would not be compensated for by the 1450 square metres of habitat in the SSSI that would be gained by the removal of a barn and hardstanding, and that the compensatory site has compacted soil that lacks the nutrients found in grazed land [6.51.8]. Natural England finds the proposed mitigation inappropriate and unlikely to attain the quality of the important part of the SSSI that would be lost, refers also to the proposed loss of what it terms ecologically significant ridge and furrow, and objects to the Scheme proposal [6.55.70g]. Chiltern says that comparable habitats have been successfully created elsewhere and that the proposed loss of ridge and furrow would be neither historically nor ecologically significant, and suggests that the matter be the subject of a planning condition [8.11.20].

- 9.9.30 If it were the case that habitat of the type found nearby in the SSSI could be successfully created at the barn site then I have no doubt the overall ecological effect of the physical alterations proposed by Chiltern at this SSSI would be beneficial to it, because there would be an increase in the amount of valuable habitat. But details of how the new habitat would be created are sparse. I conclude that if planning permission were given for the Scheme it should be subject to a condition for the protection of the SSSI to ensure that the proposed works there have the long-term effects Chiltern described at the Inquiry (Condition 35 in Appendix 1).
- 9.9.31 The former **Wendlebury Ponds county wildlife site**, identified in the Environmental Statement, is no longer so designated [4.9.29].
- 9.9.32 Part of the **Gavray Meadows county wildlife site** would be lost to development by others, for which planning permission has been granted [4.11.35] and, if it proceeded, that development would also provide a wildlife site [4.11.37, 6.38.3]. The Scheme proposal would result in a permanent loss of 2054 square metres (2%) of the wildlife site. A narrow strip of land would be taken, from the site's common boundary with the railway, and the evidence was that the land in question is not of significant conservation value [8.11.23]. Nevertheless it is part of the county wildlife site, and that must weigh in the balance. Chiltern's intention is to provide ecological improvements on nearby land that is sought to be acquired as exchange land for open space but, for reasons given elsewhere [9.17.5a], I do not recommend that that land should be compulsorily acquired. If that option were denied to Chiltern and no mitigation elsewhere could be provided, harm would remain to the wildlife site but, in view of the size, proportions and location of the land that would be lost and its ecological character I attribute only slight weight to that harm.
- 9.10 **SM8 In relation to the Oxford Meadows Special Area of Conservation (a "European site" under the Conservation of Habitats and Species Regulations 2010):**
- a) Whether the Scheme (either alone or in combination with other plans or projects) is likely to have an adverse effect on the integrity of the site, having regard to the conservation objectives of the site and to the manner in which the Scheme is**

proposed to be carried out by Chiltern Railways, including any proposed conditions or restrictions to which the draft TWA Order and deemed planning permission would be subject; and, if so,

b) Whether there are any alternatives to Chiltern Railways' proposals which are capable of achieving the objectives of the Scheme, which are feasible and which would have less adverse impact on the integrity of the site or no such impact;

c) Whether the Scheme is necessary for imperative reasons of overriding public interest; and,

d) Whether compensatory measures can be secured which would ensure the overall coherence of the Natura 2000 Network.

a) *Whether the Scheme (either alone or in combination with other plans or projects) is likely to have an adverse effect on the integrity of the site, having regard to the conservation objectives of the site and to the manner in which the Scheme is proposed to be carried out by Chiltern Railways, including any proposed conditions or restrictions to which the draft TWA Order and deemed planning permission would be subject.*

Introduction

9.10.1 The Oxford Meadows Special Area of Conservation ("the SAC") is so designated for supporting [4.9.3 - 4.9.4]:

- Annex I lowland hay meadow habitat, found in the areas which are also designated as Wolvercote Meadows SSSI, Pixey and Yarnton Meads SSSI and Cassington Meadows SSSI; and,
- The Annex II species *Apium repens* (creeping marshwort), found in part of the area which is also designated as Port Meadow with Wolvercote Common and Green SSSI.

Changes The Scheme Would Make

9.10.2 Following Scheme changes made during the Inquiry, the changes that the Scheme promoted by Chiltern is proposed to make in the vicinity of the SAC are:

- Construction of the new railway, outside but close to the SAC, and its subsequent use;
- The raising of a bridleway on the SAC above flood levels, not in the parts of the SAC where the qualifying interests or species for which the site was designated are to be found [4.5.33; 4.9.20, 8.11.10]; and,
- Changes caused by the operation of the Scheme in the volume of road traffic passing near the SAC, and which would affect the air quality there [9.8.53].

Scope Of Assessment

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- 9.10.3 The Habitats Regulations Screening Assessment undertaken by Chiltern identified that the potential impacts of the Scheme on the SAC could come from three main sources [4.9.8]:
- Direct damage or disturbance during construction;
 - Air pollution (resulting in nutrient enrichment caused by the exhaust from trains or by smothering in dust during construction of the Scheme); and,
 - Hydrological change.
- 9.10.4 The Environmental Statement also recognises that the exhaust from road traffic associated with the scheme should be included as an origin of air pollution that might cause an impact on the SAC [4.11.73].
- 9.10.5 It was said during the Inquiry that vibration associated with the Scheme could harm the priority habitat and species for which the SAC is designated [6.54.19]. No evidence was brought in support of this view to show that vibration, of the nature of that which might reasonably be expected to be associated with the Scheme, could in any circumstances cause any harm to the features which are the subject of the conservation objectives of the site. The circumstances at the site are that the various plant communities in the SAC have remained in place notwithstanding the presence of a railway for some 168 years [6.4.9] and that the Scheme with its single track would be further from the SAC than is the existing triple-tracked railway, and some 200 metres from the nearest designated feature in the SAC. [4.9.3, 4.5.5, 6.2.5]. I conclude that vibration associated with the Scheme is not a source of harm to the qualifying interests or species for which the SAC was designated.
- 9.10.6 It was said in objection to the Scheme that species might have been missed by the applicant's ecological researchers, and therefore their field notes should be placed in evidence; and that the authors of third-party ecological evidence to which Chiltern to a degree relied should be subject to cross-examination [6.54.11, 6.54.15]. But it seems to me that the process followed by Chiltern in conducting and publishing ecological surveys [4.9.7] complied with normal standards and is transparent and robust. Organisations such as Natural England and the Berkshire Buckinghamshire and Oxfordshire Wildlife Trust, and the wider public, have seen the results and no serious challenge to them was raised. The objector who raised the matter said that he had no evidence of any omission in the work, but was concerned that an omission had been made [6.54.11, 6.54.15]. I do not regard that as a serious challenge.
- 9.10.7 No other matter being raised, I conclude that potential impacts on the SAC could come from:
- Construction effects, including direct damage or disturbance during construction, smothering in dust, and hydrological change during construction;
 - Air pollution (resulting in nutrient enrichment caused by the exhaust from trains and road vehicles associated with the Scheme); and,
 - Hydrological change during operation of the Scheme.

Construction Effects

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- 9.10.8 Construction of the new railway would take place 200 metres or more from the area where creeping marshwort is to be found, and further from the lowland meadows. Access for construction would be taken along the railway and, to a limited extent, from Aristotle Lane [8.18.9]. I am satisfied that construction of the new railway would not cause direct damage or disturbance to the qualifying interests or species for which the SAC was designated.
- 9.10.9 My findings on the level crossing that serves the Trap Ground Allotments are elsewhere, and if they are accepted then there would be no need for works in the SAC. If they were not, the following considerations would apply: The proposals for raising a section of the bridleway on Port Meadow near Aristotle Lane bridge incorporate features designed to avoid any adverse effect on the movement of surface water there, identified by Natural England as their preferred option to ensure that the bridleway alterations cause no hydrological harm. The activities involved during the bridleway-raising works could be subject to a planning condition requiring compliance with a method statement that would forbid encroachment onto the qualifying interests of the SAC (so as to avoid direct damage), the dispersal of dust from the works, and hydrological disturbance during the works [8.11.8].
- 9.10.10 Providing a planning condition secured adherence to a construction method statement (Condition 16 in Appendix 1), which might be in the form of a Code of Construction Practice, and providing that method statement included appropriate controls in respect of dust management, water pollution control and changes to groundwater levels [4.9.9], I would be satisfied that construction of the new railway would not be likely to harm the qualifying interests or species for which the SAC was designated by virtue of dust (during construction) or hydrological change.

Air Pollution

- 9.10.11 The operation of trains on the new railway would give rise to exhaust emissions from their diesel motors. Objectors question the assumption, in Chiltern's assessment of the dispersal of those emissions, that the prevailing wind would be from the south-west. They argue that the assessment would be more robust if a different prevailing wind direction was assumed so as to increase the proportion of exhaust emissions blown over the SAC [6.54.17, 4.11.73]. A purpose of the work is to establish whether the Scheme is likely to have a significant effect on the SAC. The pollution concentrations are expressed as annual averages. It seems to me that the approach taken is robust in that it is based on a wind rose supported by a five-year dataset [4.11.73] and it is, in my view, most improbable that the prevailing wind would shift significantly from the direction found so as to have the effect that objectors suggest. I find no fault with the dispersal model.
- 9.10.12 I consider elsewhere in this report the effect that road and rail emissions associated with the Scheme would have on the lowland hay meadow SSSIs within the SAC, and (in the terms of paragraph 8 of PPS9, with the everyday meaning of "likely") find that harm would not be likely [9.8.53, 9.8.54]. In the case of a SAC, it has been established by the courts that it can only be concluded that a proposal would be unlikely to have a significant effect if such a risk can be excluded on the basis of objective

information.

- 9.10.13 There is agreement that, because of the affinity of creeping marshwort for nitrogen, the nutrient enrichment the Scheme would be likely to bring would not be harmful to the SAC qualifying interest in the Port Meadow with Wolvercote Common and Green SSSI element of the SAC [4.9.15 to 4.9.16, 6.51.7, 6.55.70b]. Thus, the risk of harm, due to air quality changes, to the creeping marshwort qualifying interest can be excluded on the basis of objective information.
- 9.10.14 Chiltern's evidence is that the lowland hay meadow qualifying interest of the SAC (which is in an area that is co-terminous with the Wolvercote Meadows SSSI, the Pixey and Yarnton Meads SSSI and the Cassington Meadows SSSI) would be affected by the Scheme's air quality changes in a way that is difficult to predict, and that, for the reasons given, the likely increase in airborne nitrogen is not predicted to have any material adverse effect on two of the plant communities [4.9.14]. Neither the difficulty of prediction, nor the lack of a prediction of harm, seems to me to be objective evidence that excludes the possibility of harm. (And I am mindful that the conclusions drawn by Chiltern are based on what I consider to be an erroneous assessment of the road traffic implications of the development, which I have assessed as slightly underestimating the air quality change [9.8.50, 9.8.51].)
- 9.10.15 When the Environmental Statement was prepared, a precautionary approach was suggested whereby a planning condition would require the monitoring and remediation of harm to the lowland hay meadow interest of the SAC that might arise from the Scheme; but Chiltern subsequently withdrew from that position because of a lack of certainty that those with an interest in Port Meadows would agree to remediation measures identified [4.9.17]. No such view was expressed by Chiltern in respect of the other constituent parts of the SAC and it seems to me that there is at least a reasonable prospect of the action in question being performed within the time available. Such a condition would provide confidence that the risk of harm to the lowland meadow qualifying interest of the SAC would be excluded, and is necessary to provide such confidence. It should apply to those parts of the Oxford Meadows SAC that are co-terminous with the Wolvercote Meadows SSSI, the Pixey and Yarnton Meads SSSI and the Cassington Meadows SSSI.
- 9.10.16 Subject to such a condition (Condition 33 in Appendix 1), I am satisfied that operation of the new railway, including the associated road traffic effects, would not be likely to harm the qualifying interests or species for which the SAC was designated by virtue of air pollution.

Hydrological Change During Operation Of The Scheme

- 9.10.17 Operation of the new railway would have no effects on the groundwater regime at the SAC [8.11.8].

Conclusion On The Effect Of The Scheme Alone

- 9.10.18 I therefore conclude that the Scheme, subject to the planning conditions I have described, is not (in the terms of the Conservation of Habitats and Species Regulations 2010) likely to have any significant effect on the integrity of the Oxford Meadows SAC, having regard to the conservation

objectives of the site.

Combination With Other Plans Or Projects

- 9.10.19 It is possible that the SAC might in future also be affected by development that might come forward at the Northern Gateway site. This site is identified by the Inspectors' report on the examination into the Oxford Core Strategy development plan document as one for which a masterplan might come forward and, if that happened, that masterplan would need to be informed by an Appropriate Assessment of the potential hydrological and air quality impact on the SAC [3.3.2]. But, when the Inquiry closed, the Core Strategy had yet to be adopted. It was expected to require modelling and assessment of the effects on the SAC of the Northern Gateway proposal, and to limit the size of that development if adverse effects on the SAC were identified [8.11.5]. Meanwhile, the nature and timing of development at the Northern Gateway are very uncertain [8.11.6]. It is clear to me that there is neither a plan nor a project at the Northern Gateway site that has been articulated in enough detail to allow a reliable assessment to be made of the likely effect on the SAC of development that would take place at the Northern Gateway site, either alone or in conjunction with the Scheme; and that, should such a plan or project come forward, arrangements are being made for an Appropriate Assessment of its effects on the SAC. There is no reason to suppose that such an assessment would not incorporate the effects of the Scheme, if approved, and any other plans or projects that might have emerged in the intervening time.
- 9.10.20 There is no other "plan or project" likely to have a significant effect on the SAC [3.3.3].
- 9.10.21 Therefore, there is no "plan or project" in combination with which the Scheme proposals should be assessed in respect of their combined effect on the SAC. My finding in paragraph 9.10.18 need not be altered.
- 9.10.22 Since it is open to the Secretaries of State to take a different view, I now turn to other Matters raised in this connection.
- b) Whether there are any alternatives to Chiltern Railways' proposals which are capable of achieving the objectives of the Scheme, which are feasible and which would have less adverse impact on the integrity of the site or no such impact.***
- 9.10.23 Chiltern's position is that there is no such alternative solution [8.11.13].
- 9.10.24 Objectors argue for the retention of the Aristotle Lane level crossing, and I consider that elsewhere [6.1.4, 9.13.16 et seq]. Retention of that level crossing would in my view remove the need for alterations to the Aristotle Lane bridleway on Port Meadow, in the SAC, and any impact on the SAC from those works would therefore be avoided.
- 9.10.25 Of the other alternatives considered at the Inquiry, I am satisfied that none is capable of meeting the objectives of the Scheme [9.2.6, 9.4.6, 9.4.8]
- c) Whether the Scheme is necessary for imperative reasons of overriding public interest.***

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- 9.10.26 I find in paragraph 9.14.12 of this report that the circumstances in this case are very special in that the Scheme would provide a city of the size and calibre of Oxford with a necessary improvement to its rail connections to London and elsewhere while causing relatively little harm.
- 9.10.27 A contributor to that finding is my conclusion that the Scheme would not be likely to have any adverse effect on the integrity of the SAC, having regard to the conservation objectives of the site. If the Appropriate Authority reached a different view and found that an adverse effect in the SAC was likely, then the need for the Scheme might override that harm.
- d) *Whether compensatory measures can be secured which would ensure the overall coherence of the Natura 2000 Network.***
- 9.10.28 No compensatory measures were identified at the Inquiry. Chiltern argues that to suggest they would be necessary would be untenable [8.11.13]. Mr Feeney argues that it would be impossible to compensate Natura 2000 for the loss of the lowland hay meadows or the creeping marshwort [6.54.13]. My finding is that, were it to be held that the Scheme would disrupt the overall coherence of the Natura 2000 network, no compensatory measure could be secured that would restore the Network.
- 9.11 **SM10 The measures proposed by Chiltern Railways for mitigating any adverse impacts of the Scheme, including:**
- a) The proposed Code of Construction Practice;**
- b) Chiltern Railways' Design and Access Statement;**
- c) The proposed diversions for rights of way stopped up under the draft TWA Order, including whether they would satisfy the requirements of section 5(6) of the Transport and Works Act;**
- d) Any measures to avoid, reduce or remedy any major or significant adverse environmental impacts of the Scheme; and,**
- e) Whether and, if so, to what extent, any adverse environmental impacts would still remain after the proposed mitigation.**
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- a) *Code of Construction Practice***
- 9.11.1 Chiltern proposes that a Code of Construction Practice should be drawn up for approval by the local planning authorities. Its purpose would be to protect the environment, local residents, business and the general public from adverse effects of carrying out the construction work associated with the Scheme. A planning condition would require compliance with the approved Code. A draft Code was before the Inquiry (CD/1.24).
- 9.11.2 Objections raised in respect of matters expected to arise during construction of the Scheme related to such things as site security
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[6.31.1], site restoration [6.31.1, 6.47.3], noise and vibration [6.13.2, 6.39.3, 6.43.8], working hours [6.13.2, 6.43.8], dust and dirt [6.47.3], construction traffic management [6.27.2, 6.55.88], limitations on access to nearby properties during the works [6.9.8, 6.27.2, 6.55.15], and "before and after" defects surveys of properties which may be at risk of damage from ground movement caused by the works [6.17.3, 6.43.11, 4.11.17]. These matters are all addressed by the draft Code.

- 9.11.3 It is clear to me that, subject to Condition 18 in Appendix 1, the draft Construction Code of Practice would establish a suitable regime for the construction of the Scheme. Notwithstanding the views of some objectors [6.13.2, 6.43.7], it is appropriate and a matter of considerable precedent for local planning authorities to approve suitable construction method statements (or Construction Codes of Practice) and to require by planning condition adherence to them. To ensure that the condition is consistently and correctly applied, the list of properties which may be at risk of damage should be subject to the approval of the local planning authority.

b) *Mitigation Measures Proposed In The Design and Access Statement*

- 9.11.4 The design and access statement proposes the following mitigation measures [4.11.18]:

a) Landscape strategies for Tubbs Lane, Langford Lane, Mill Lane (Islip) and the Rewley Abbey Stream Swing Bridge.

b) Noise mitigation measures which might be required.

c) *Mitigation Measures Proposed by Chiltern In Respect Of Diversions of Public Rights Of Way, and Section 5(6) of the Transport and Works Act*

- 9.11.5 I have previously considered the proposed diversions of public rights of way and have found in each case that the Secretary of State would have reason to be satisfied that an alternative right of way would be provided insofar as would be necessary. I have also considered the effect of diversions of public rights of way proposed by Chiltern in mitigation of the effects of proposed closures of public rights of way [9.7.16 to 9.7.65].

d) *Measures Proposed By Chiltern To Avoid, Reduce Or Remedy Any Major Or Significant Adverse Environmental Impacts Of The Scheme*

- 9.11.6 Here I consider such measures to include only those elements of the Scheme which are added to the functional requirements of the railway (including among other things drainage works) with a view to mitigating major or significant adverse environmental impacts of the Scheme in its locality. In document CRCL/INQ/3/1 [4.10.5] attention is drawn to noise and vibration, to bats and Wolvercot Tunnel, to the Oxford Meadows SAC, and to sites of special scientific interest.

In Respect Of Noise

- 9.11.7 Chiltern proposes, through the Noise and Vibration Mitigation Policy [4.8.31] ("the Policy"), to apply operational noise mitigation measures

where reasonably practicable to protect noise-sensitive premises where train noise associated with the Scheme would otherwise exceed levels identified in the Policy.

- 9.11.8 Examples of operational noise mitigation measures which might be used, according to the circumstances in each particular case, include:
- Mitigation at source through rail infrastructure solutions.
 - Noise barriers.
 - Noise insulation of premises.
- 9.11.9 The operational noise levels that Chiltern proposes would trigger the application of such measures where reasonably practicable are derived from PPG24 *Planning and Noise* and from *The Noise Insulation (Railways and Other Guided Transport Systems) Regulations 1996* [4.8.11 to 4.8.17].
- 9.11.10 Construction would normally take place during stated daytime hours, on Monday to Friday and on Saturday mornings. During construction, a Code of Construction Practice would apply to the works, alongside section 61 of the Control of Pollution Act 1974. Best practicable means would be employed to ensure, as far as possible, that the maximum noise at any residential dwelling generated by construction plant and equipment should not normally exceed stated limits derived from British Standard BS 5228 *Code of Practice for Noise and Vibration Control on Construction and Open Sites*. There would be a noise monitoring programme, and expected exceedences would be notified to the local authority in advance [4.8.3 to 4.8.9].

In Respect Of Vibration

- 9.11.11 Chiltern proposes, through the Noise and Vibration Mitigation Policy [4.8.31] ("the Policy"), to design the railway so as to avoid significant vibration effects and to apply operational vibration mitigation measures where reasonably practicable at sensitive premises where train-induced vibration noise associated with the Scheme would exceed levels identified in the Policy.
- 9.11.12 Examples of operational vibration mitigation measures which might be used, according to the circumstances in each particular case, include the use of intrinsically low-vibration track designs, resilient rail fixings, under-ballast matting, sleepers mounted on resilient material or isolation below a concrete track bed [4.8.38].
- 9.11.13 Chiltern proposes such measures to be used in circumstances where there would otherwise arise at sensitive premises vibration levels greater than those identified by British Standard BS6472-1:2008 *Guide to the evaluation of human exposure to vibration in buildings. Part 1: Vibration sources other than blasting* as levels at or below which the possibility of adverse comments is low [4.8.32, 4.8.26].
- 9.11.14 During construction, vibration caused by the works at sensitive receptors would be controlled by a Code of Construction Practice [4.8.23, 4.8.24].

In Respect of Bats at Wolvercot Tunnel

- 9.11.15 Mitigation measures are proposed for the benefit of bats during

construction work at the Tunnel, and when the Scheme is in operation [8.11.25 to 8.11.30].

In Respect of Other Protected Species

- 9.11.16 Mitigation measures are proposed for the benefit of great crested newts, reptiles and badger [4.9.33 to 4.9.38]. Planning conditions are proposed to secure arrangements for the conservation of the brown hairstreak butterfly, and tassel stonewort [4.11.93].

In Respect Of The Oxford Meadows SAC

- 9.11.17 The Code of Construction Practice would regulate the way in which works are executed near the SAC [4.9.9].

In Respect Of Sites of Special Scientific Interest

- 9.11.18 A farm building and hardstanding is proposed to be relocated out of the Wendlebury Meads and Mansmoor Closes SSSI, to mitigate the loss of habitat elsewhere in the SSSI that would arise from the Scheme [4.9.21].

In Respect Of Landscape and Visual Amenity

- 9.11.19 Landscaping schemes would be introduced as appropriate in association with the Scheme at the following locations:
- Bicester Town station, Islip station, Water Eaton Parkway Station and the aggregates depot, and Oxford station.
 - Tubbs Lane.
 - Works Nos. 6, 11, 12, 13, 14, 15, 16, 17, and 18.
 - Rewley Abbey Stream bridge (also known as Sheepwash Channel bridge).

- 9.11.20 These are presented as reserved matters [4.11.94].

e) The Extent Of Adverse Environmental Impacts That Would Remain After The Mitigation Proposed By Chiltern

In Respect Of Noise And Vibration

- 9.11.21 In the Noise and Vibration Mitigation Policy [4.8.31 *et seq*] Chiltern proposes a process by which mitigation of noise and vibration associated with operation of the Scheme would be applied. The aims of that process are clearly stated but the specific measures to be implemented at each location are yet to be determined. Similarly, the noise and vibration effects of the construction of the Scheme would be regulated by a Code of Construction Practice, a draft version of which was before the Inquiry [4.11.15 to 4.11.17].
- 9.11.22 My conclusion regarding construction noise associated with the Scheme, with the proposed mitigation measures, is provided at paragraph 9.8.6 of this report.
- 9.11.23 My general conclusions regarding operational noise associated with the Scheme, with the proposed mitigation measures, are provided at paragraph 9.8.21 of this report. My conclusions regarding noise effects at Wendlebury Gate Stables are provided at paragraphs 9.13.11 and 9.13.14 of this report. My conclusion regarding noise effects at College

Farm is at paragraph 9.13.15.

9.11.24 My conclusion regarding vibration associated with construction of the Scheme is provided at paragraph 9.8.25 of this report.

9.11.25 My conclusions regarding vibration associated with operation of the Scheme are provided at paragraph 9.8.35 of this report.

In Respect Of Bats At Wolvercot Tunnel

9.11.26 My conclusions regarding the Scheme's effect on bats at Wolvercot Tunnel, with the proposed mitigation measures, are at paragraph 9.9.14 of this report.

In Respect of Other Protected Species

9.11.27 My conclusions regarding Chiltern's proposals regarding mitigation measures for great crested newts, reptiles, badgers, brown hairstreak butterfly, and tassel stonewort are at paragraphs 9.9.17 to 9.9.22 of this report.

In Respect Of Sites of Special Scientific Interest

9.11.28 My conclusion regarding mitigation at Wendlebury Meads and Mansmoor Closes SSSI is provided at paragraph 9.9.30 of this report.

9.11.29 My conclusion regarding mitigation at the Hook Meadow and Trap Grounds SSSI is provided at paragraph 9.9.26 of this report.

In Respect of Landscape and Visual Amenity

9.11.30 My conclusion regarding the effect, with regard to landscape and visual amenity, that the Scheme proposals (with the proposed mitigation) would have on the environment is set out in paragraph 9.8.76 of this report.

Overall Summary Of Adverse Environmental Effects With Mitigation Where Proposed

9.11.31 The adverse environmental effects of the Scheme with the proposed mitigation and the planning conditions referred to in my individual conclusions would be:

- Localised adverse visual effects due to the bridges proposed at Tubbs Lane and Mill Lane [9.8.76];
- Slight to moderate harm (in the terms of the DMRB) to cultural heritage (the settings of Islip Conservation Area and various Listed Buildings) and archaeology [9.8.85];
- Loss of a small part of the Gavray Meadows county wildlife site [9.9.32]; and,
- Permanent loss of some 15.19 hectares of the best and most versatile agricultural land [9.8.91].

9.12 **SM11 The adequacy of the Environmental Statement submitted with the application for the TWA Order having regard to the requirements of the Transport and Works (Applications and Objections Procedure) (England and Wales) Rules 2006 and**

**whether the statutory procedural requirements have been
complied with.**

Adequacy

- 9.12.1 Rule 11 of The Transport And Works (Applications And Objections Procedure) (England and Wales) Rules 2006 refers to the provision of information in environmental statements.
- 9.12.2 The Environmental Statement consists of seven volumes, as follows:
- Document CD/1.15: Environmental Statement – Volume 1 (Chapters 1-4).
 - Document CD/1.16: Environmental Statement – Volume 2 (Chapters 5-16).
 - Document CD/1.17: Environmental Statement – Volume 3 (Figures and Plans).
 - Document CD/1.18: Environmental Statement – Volume 4 (Annexes A – L).
 - Document CD/1.20: Environmental Statement Non-Technical Summary.
 - Document CD/1.22: Addendum to the Environmental Statement.
 - Document CD/1.22/1: Second Addendum to the Environmental Statement.
- 9.12.3 The Environmental Statement includes:
- a) A description of the project comprising information on the site, design and size of the proposed works (CD/1.18, Section 1.3; CD/1.22/1, Chapter 1).
 - b) A description of the measures then proposed to be taken in order to avoid, reduce and, if possible, remedy any significant adverse effects on the environment of the proposed works (CD/1.16 sections 6.5, 7.8, 8.5, 9.6, 10.5, 11.6, 12.3, 13.5, 15.6; CD/1.22 section 3.2; CD/1.22/1 sections 4.5, 5.5, 6.5 and 7.5).
 - c) Data required to identify and assess the main effects which the proposed works are likely to have on the environment (CD/1.16 and CD/1.18).
 - d) An outline of the main alternatives to the proposed works studied by the applicant and an indication for the main reason for his choice, taking into account the environmental effects (CD/1.18, Annex C).
 - e) A non-technical summary of the information provided under sub-paragraphs a) to d) (CD/1.20, CD/1.22 section 5, CD/1.22 section 8).
- 9.12.4 Some material in the Environmental Statement was replaced or augmented by the applicant before or during the Inquiry, often in

response to matters raised in objections or at the Inquiry. For example, the draft Bat Mitigation Plan presented in document CD/1.22 (April 2010) was the subject of further work during the Inquiry [4.9.32, 8.11.30]; and Chiltern undertook further noise modelling as a result of representations made following publication of the Environmental Statement, and informed interested parties of the results [8.3.4]. To me it is reasonable that the promoter of a scheme should respond to points raised by others during the Inquiry process or in response to the publication of the Environmental Statement.

- 9.12.5 Objectors state that the Environmental Statement is inadequate in its presentation of information relating to the assessment of vibration at Lakeside [6.19.11, 6.20.28]; but the survey that provided the data in question was made in October 2010 and so did not inform the Environmental Statement [8.3.15].
- 9.12.6 A challenge to the adequacy of the Environmental Statement in respect of air quality management [6.20.22] is based on a misunderstanding [8.4.1].
- 9.12.7 The Environmental Statement is also criticised on the grounds that it does not assess the effect of noise on a housing scheme that is yet to be built [6.55.81], but I agree (and the point was not challenged) that to attempt a noise assessment of the Scheme's effect on a proposed housing site before the housing detail is decided (as would be the case here), would be premature [8.3.12t].
- 9.12.8 I find in paragraph 9.8.35 that the approach taken in the Environmental Statement to the matter of vibration has not been shown to be reliable. More work is needed to establish whether and where mitigation is necessary, and that can be secured by condition. Subject only to that, I am satisfied that the Environmental Statement is adequate in the terms of Rule 11.

Statutory Procedural Requirements

- 9.12.9 All parts of the Environmental Statement were publicised in accordance with the relevant procedures, and all statutory requirements in relation to consultation have been fully complied with [4.11.11].

/over

9.13 **Other Relevant Issues Raised, Not Included In The Statement Of Matters**

East West Rail

- 9.13.1 The East West Rail proposal enjoys some policy support [4.3.3] and is to be considered as a candidate scheme for the Department for Transport's High Level Output Specification for the period 2014 to 2019 [4.3.7]. The Secretary of State has agreed to contribute to the cost of the Scheme's Phase 2A works, which would otherwise be part of East West Rail [4.1.14]. Its promoters expect that East West Rail would be the subject of an Order application [4.3.10]. East West Rail was not before the Inquiry, other than those parts of it which constitute Phases 2A and 2B of the Scheme.
- 9.13.2 Some parts of East West Rail would be included in Phase 2B of the Scheme, and preparatory work for many of those would be undertaken most expeditiously as part of the Scheme, while the railway would in any event be closed [4.3.11 to 4.3.14]. It seems to me that the public interest would be likely to be best served by such an approach.
- 9.13.3 An exception to this approach would be in the construction of the Phase 2B access to the MoD site, which would be implemented at a later date, separately from Phase 1. Works for the Phase 2B MoD access would be undertaken only if and when East West Rail is authorised [4.5.41]. The land parcels identified in my paragraph 4.5.38 would not be used until then. Nor would that at Islip station, identified in paragraph 4.5.39. Thus there would be no benefit to the public interest in their acquisition before East West Rail is in a position to proceed.

Defence Estates

- 9.13.4 This statutory objection was made on grounds of a lack of clarity in the notice served. There has been dialogue with Chiltern. The objection was neither withdrawn nor pursued at the Inquiry. The dialogue has provided an opportunity for any lack of clarity to be removed. I find nothing here to inhibit the making of the Order [6.55.85, 8.21.10].

Utility Companies

- 9.13.5 Thames Water Utilities Limited has agreed to the protective provisions of the draft Order, and did not pursue its objection [8.21.12]. Two utility companies objected to the Scheme on the grounds that details of the proposals had not been provided or agreed, and that compensation had not been agreed [6.55.5, 6.55.7]. The draft Order includes protective provisions at Schedule 14 which have been drawn to their attention, and the objections have not been pursued [8.21.11]. I find nothing from the utility companies that need inhibit the making of the Order.

Bus Services

- 9.13.6 It is argued by the Bus Users UK Oxford Group that new bus routes would be needed to serve Water Eaton Parkway station and to carry passengers from Brackley to Bicester Town [6.45.3]. The evidence is

that the Water Eaton Parkway site already has excellent bus links [4.2.22, 4.2.30]. In my view, the Scheme would be capable of accommodating increased bus traffic at the two stations identified, but I am not persuaded that the promoter should be required to procure bus services as suggested.

Railway Safety

- 9.13.7 Objectors are concerned that trains on the Scheme may become derailed and harm private property, particularly where the track is above the general ground level [6.12.3, 6.20.29, 6.22.6]. Chiltern point to the excellent safety record of railways in the UK and the expected involvement of Network Rail in the Scheme design. The Scheme would be built and maintained in compliance with all current safety standards [8.6.1]. For my part, it is a matter of observation that railways and private property co-exist throughout the country, even with embankments or urban viaducts, and no evidence was brought of any reason why the railways' current excellent safety record should be diminished by derailments on the Scheme.

Public Health

- 9.13.8 In common with all trains built since about 1990, the trains used on the Scheme would have retention tanks so as to avoid the need to discharge effluent onto the track. Notwithstanding objectors' concern, I am satisfied that the Scheme would not contaminate the trackbed [8.21.3, 6.55.50].

Freight Access

- 9.13.9 Arrangements would be made to maintain rail access during the construction period to the aggregate depot, the MoD sidings and the waste facility which are served by the line. I am satisfied that the objections of Freightliner Group Limited and Freightliner Limited raise no issue that need prevent the making of the Order. [4.5.42, 6.55.6]

Wendlebury Gate Stables

- 9.13.10 There are three matters at issue here:
- a) Whether the Scheme would have an unacceptable effect on the keeping of horses in fields at the site;
 - b) Whether the Scheme would have an unacceptable effect on riding tuition in the enclosures known as the large riding school and the small riding school and at the paddock near Bramlow; and,
 - c) If there would be an unacceptable effect, whether the suggested noise fence would provide appropriate mitigation.
- 9.13.11 **Effect on the keeping of horses in fields at the site** – The evidence is that horses are flight animals that can adapt over a period to noise and sudden movement arising from railway trains [6.36.13, 8.15.8]; that about 10% of the (typically) 40 horses on the site are transient and do not have the opportunity to adapt, and that each horse that newly arrives at the site would need time to acclimatise [6.36.2, 6.36.13]. The reports by the operators of riding stables a comparable distance from a comparable railway (at Castle Hill, Cathiron Farm and Alder Root) refer to

communication difficulty but (notwithstanding the evidence of Mr Peace) not to inconsistency between their positions and the conduct of any sort of equestrian business [8.15.12, 6.36.24, 6.36.14]. It is clear to me that proximity of the Scheme to a field would not prevent one from keeping horses there, particularly in cases such as this where there is the option of putting nervous new arrivals into areas some distance from the railway. The effect of the Scheme on the keeping of horses in fields at Wendlebury Gate Stables would, on the balance of the evidence, be acceptable.

- 9.13.12 **Effect on riding tuition** – There is no dispute that speech communication between instructor and rider should, for reasons of safety, be maintained during riding tuition, nor that the passage of trains along the Scheme would cause speech interference (over a distance of 30 metres) between instructor and rider at the riding schools at Wendlebury Gate [8.15.6, 6.36.6]. Chiltern argues that, in view of the ambient conditions there many other noise sources could have a similar effect; but the evidence is that such events are infrequent, whereas the projected effect of the railway would occur much more often [6.36.3]. The evidence shows that the Scheme, without noise mitigation here, would be materially detrimental to conditions at Wendlebury Gate Stables in that noise associated with its use would render riding tuition unsafe in the riding schools at Wendlebury Gate Stables.
- 9.13.13 **Whether the suggested noise barrier would provide appropriate mitigation** – A reduction of 10 dB in the pass-by noise generated by a passing train is identified by the 24 Acoustics report as sufficient for the Scheme to have minimal effect on speech intelligibility [6.36.8], and Chiltern does not disagree with the findings of the report [8.15.6]. No analysis is produced to show whether a lesser reduction would suffice, or that a barrier as suggested by the objectors would have such an effect, and the objectors do not say how high the barrier they propose would need to be [6.36.9]. It is not shown that the suggested noise barrier would provide appropriate mitigation. Nor do I accept that the potential presence of buried artefacts would render impossible the erection of a noise barrier or the installation of other noise mitigation measures [8.15.11].
- 9.13.14 Therefore, a scheme of mitigation should be considered and if necessary implemented so as to ensure that the noise levels caused by individual passing trains would not impede voice communication between an instructor and a rider over a distance of 30 metres when both are in either the “large riding school”, the “small riding school”, or the paddock opposite Bramlow. The design of the scheme of mitigation should be independently validated, and the validated scheme of mitigation should be subject to the approval of the local planning authority. This can be secured by a condition (Condition 19, item 3, in Appendix 1).

College Farm, Wendlebury

- 9.13.15 I consider elsewhere the proposed changes to access between the two parts of this farm [9.8.95]. The Scheme would be unlikely to noticeably increase train horn noises [8.14.24], and so I am satisfied that Mr Howard’s chickens would suffer no additional disturbance from trains on the railway. I have concluded that the presence of a nearby railway

of the character proposed would not preclude the conducting of an equine business [9.13.11], although that is not to say that hacking at College Farm would not be affected. It seems to me that the matters raised could be resolved by compensation, should loss be found to arise from the Scheme.

Access To Trap Ground Allotments

- 9.13.16 Access may be gained to the Allotments via Port Meadow, via a bridleway bridge over the railway (and then via Port Meadow), or via a private footpath level crossing [6.1.1, 8.2.1]. The Scheme would close the footpath level crossing and alter the route that includes the bridleway bridge [4.5.33, 4.6.7, 4.11.33, 8.2.11]. The Scheme would also add a fourth track to the railway at the Aristotle Lane level crossing so that, if the crossing was not closed, a level crossing would be newly built on the Scheme.
- 9.13.17 Network Rail's policy towards managing level crossing risk is set out in "Our Approach To Managing Level Crossing Safety". Only in exceptional circumstances shall Network Rail permit new crossings to be introduced onto the network. And where reasonably practicable Network Rail will seek to close or divert crossings or enhance their safety in other ways [4.6.5].
- 9.13.18 The Trap Ground Allotment Association ("the Association"), Oxford City Council and others put the case that the circumstances at Aristotle Lane are exceptional so that the existing crossing should be retained and another should be introduced to allow allotment holders to cross the railway corridor that would include the Scheme [6.1.4, 6.55.33].
- 9.13.19 My conclusion on this matter relies on balancing the harm (if any) that would be avoided by the Scheme proposal against the harm (if any) that would be avoided by the objectors' proposal, which I consider here to be the level crossing shown on document Obj5/16 and the Scheme proposal for car parking; and on consideration of whether the circumstances are exceptional.
- 9.13.20 The Scheme proposal would avoid any harm arising from the use of the existing level crossing, and any harm arising from the use of the level crossing proposed by objectors.
- 9.13.21 Pedestrians at the existing level crossing have substandard visibility along the existing line, but that could be improved by the removal of vegetation [6.4.7, 6.4.19, 8.2.2 to 8.2.4]. The ALCRM includes consideration of sighting distances. The existing crossing's ALCRM score is C3 [4.6.6]. Those responsible for the railway have, over the years, considered closing the crossing but it has not been closed [8.2.6]. There have been three near-miss incidents on the crossing in the stated period but there has never been a collision at the crossing, which has been in use for very many years [8.2.2, 6.4.9]. The harm avoided by its closure would be very slight, a conclusion that is reinforced by previous decisions to not close the existing crossing.
- 9.13.22 Pedestrians at the proposed level crossing would have the proper amount of visibility along the Scheme [8.2.10]. Document Obj5/16 was before the Inquiry for more than 6 weeks [6.4.8], and no fault was found with

- the principle of the crossing arrangement it represents [8.2.9]. The Objectors' proposal, in conjunction with the train frequency proposed by the Scheme, with some 2 trains per hour each way, would result in an ALCRM score of C4 on the Scheme railway, which would worsen to B3 if there were 4 trains per hour each way such as might be exceeded if East West Rail went ahead [4.4.11, 8.2.8]. The additional risk of harm with the Scheme train frequency would be less than that at the existing crossing and therefore very slight.
- 9.13.23 The risk of harm associated with the Objectors' proposal would be the sum of (a) the very slight risk of harm associated with retention of the existing crossing, plus (b) the very slight risk associated with the Objectors' proposal in conjunction with the Scheme's level of traffic (without East West Rail). Because the individual risks are so small, the total risk would itself be very slight [6.4.10]. The harm avoided by not building the proposed level crossing would remain very slight, unless East West Rail went ahead, in which case it might be effectively more.
- 9.13.24 I therefore attribute very slight weight to the harm that the Scheme proposal would avoid until East West Rail proceeds.
- 9.13.25 The Objectors' proposal would avoid the harm associated with the Scheme proposal's extra travel distance and effort involved in getting across the railway to the allotments, and would offer new measures to reduce risk at the crossing.
- 9.13.26 There was no evidence that allotment holders are, as a group, less able to ascend and descend the Aristotle Lane bridge when unencumbered by produce and the like than are the general public, nor that the proposed alterations to that bridge would put them at a relative disadvantage. I am satisfied that the bridge alterations proposed would be consistent with the DMRB, and that the altered bridge would be usable by the general public without undue difficulty [8.2.11]. Many people visit Port Meadow via the bridge and they rely on very similar access to emergency services as would be available to allotment holders with the Scheme. When unburdened, allotment holders would have no greater difficulty than the general public when using the bridge. The harm would be the extra time taken (in comparison with the current arrangement) and that harm would be very small [8.2.18].
- 9.13.27 Notwithstanding the stores on the site [8.2.1], from time to time bulky or heavy loads must be carried to or from the allotments by allotment holders and I am satisfied that this would be much more onerous for allotment holders with the Scheme than with the objectors' proposed level crossing, and that the carrying of such loads is a necessary part of the use of the allotments. Carrying distances would increase, both horizontally and vertically [6.2.2, 8.2.18], and it is clear that some allotment holders would be seriously disadvantaged by such a change [6.1.9, 6.2.2, 6.3.3, 6.55.89]. This would be a real and noticeable effect, and I attribute more weight to it than I do to the very slight weight I associate with the risks at the level crossings.
- 9.13.28 I am not persuaded that the alternative (suggested by Chiltern [8.2.13, 8.2.16]), of motorised access across Port Meadow for those individuals who would find particular difficulty otherwise, has the necessary support

of Oxford City Council; their evidence is that the level crossing should be retained and no more traffic admitted to Port Meadow [6.55.33, 6.55.32]. Nor do I agree that it would be enough to replace a right of access with an informal accommodation with the City Council [4.5.33]. And a part of the Scheme that would admit more vehicles to the Meadow (and that was the subject of objections) was withdrawn by Chiltern during the Inquiry [4.5.33, 6.48.5, 6.49.3].

- 9.13.29 I note too the options identified by allotment holders for enhancing safety at the level crossing, the implementation of which seems to me consistent with the Office of Rail Regulation's policy [6.2.7].
- 9.13.30 I therefore find that the harm that the objectors' proposed level crossing would avoid would outweigh the harm that the Scheme proposal would avoid prior to the introduction of East West Rail only. I make no finding in respect of the effect of the currently unauthorised East West Rail scheme, which is not before me [4.3.10].
- 9.13.31 The circumstances are exceptional in that the following combination of factors exists:
- Although the bridge could be used by many allotment holders for some of their visits, the level crossing option would provide the only universally feasible and reasonably practicable means of access to a well-used site the use of which involves the manual conveying of heavy items across the railway by a group of people of widely differing physical capabilities;
 - There exists the possibility of forming a new level crossing compliant with relevant geometric standards;
 - The new crossing would be provided in conjunction with the retention of an existing crossing;
 - Means have been identified whereby the safety of the existing level crossing may be improved beyond its current levels; and,
 - There is no contention that the matter can be addressed by compensation.
- 9.13.32 I therefore conclude on this matter that:
- a) Aristotle Lane accommodation crossing should not be closed, and the crossing should not be identified in Schedule 9 of the Order;
 - b) A new accommodation foot crossing of Work No. 3 should be provided at the Aristotle Lane crossing, for the use of the members of the Trap Ground Allotment Association; and,
 - c) It would be consistent with the Office of Rail Regulation's willingness to support innovative solutions to level crossing problems if Chiltern or Network Rail were to introduce such measures as are reasonably practicable to improve safety at the level crossing by the time the new accommodation foot crossing is opened. These should include the cutting back of vegetation to improve visibility for crossing users [6.4.7], and perhaps other measures suggested by objectors [6.2.7] or devised by Chiltern or Network Rail.

Car Parking At Aristotle Lane

- 9.13.33 While noting that the different car parking arrangement at Aristotle Lane proposed by Mr Salisbury during the Inquiry would change the land acquisition near St Philip and St James School [6.4.21], I note too that the arrangement proposed is not agreed by Oxford City Council or Chiltern [6.55.33, 8.2.17]. Oxfordshire County Council considers that the new proposal would benefit the school [6.55.41]. Neither the School nor the County Council objected to this element of the Scheme proposal, and I am not persuaded that a modification to the Scheme is necessary in this respect.

Trap Grounds Town Green

- 9.13.34 The Friends of the Trap Grounds seek the retention of access along an informal path that goes to the Trap Grounds Town Green [6.55.91]. It seems to me that this is a matter for detailed design and that, as the path is "informal" and as there is no evidence that any rights exist for its use, there is no basis upon which the issue should be addressed through the matters before the Secretaries of State.

- 9.14 **SM9 Whether the Scheme would be inappropriate development in the Green Belt in the terms of PPG2: *Green Belts* and, if so, whether the harm by reason of inappropriateness, and any other harm, is clearly outweighed by other considerations, so as to amount to the very special circumstances necessary to justify the development; whether the proposed park and ride site at Water Eaton would meet the tests in paragraph 3.17 of PPG2.**
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The Tests In Paragraph 3.17 of PPG2

- 9.14.1 Objectors challenged the results of the application of the tests. It was argued that the chosen site would increase car journeys, but the evidence is that the Scheme proposal would fit well with existing (bus) public transport provision. It was argued that the new station should not be separate from the proposed Northern Gateway employment development site, which includes the Peartree park and ride site, but two sites at Peartree (one outside the Green Belt) were considered in the assessment and found lacking in terms of sustainable development and other objectives [6.54.5, 4.11.25].
- 9.14.2 Part e) of paragraph 4.11.25 of this report describes the application of the five tests from paragraph 3.17 of PPG2. Neither the Oxford Green Belt Network nor Campaign To Protect Rural England Oxfordshire offered evidence to support the contention that the station and the park and ride parking would be inappropriate development here [6.40.6, 6.41.5], and there was no other sustained criticism to that effect at the Inquiry. I am satisfied that the five tests of paragraph 3.17 are met in this case, and that the proposed park and ride development would therefore not be inappropriate development in the Green Belt.

Whether The Scheme Would Be Inappropriate Development In The Green Belt

- 9.14.3 There is no dispute that the Scheme would be inappropriate development in the Green Belt insofar as it includes:
- Relocation of the aggregates depot within the Green Belt [4.11.25, 6.41.7, 6.55.86]; and,
 - Mill Lane bridge, Islip [8.10.3].
- 9.14.4 The Scheme would lie in the Green Belt over a distance of some 10 kilometres, with other smaller areas in the Green Belt at Port Meadow and in Work No. 2 near chainage 17000 [4.11.21]. In respect of much of the 10-kilometre distance a railway is already present and it seems to me that the extent of the Scheme's engineering works that would have any discernible effect on openness would be confined to the new bridges that the Scheme would provide in that part of the Scheme (Work Nos. 13, 14, 15, 16, 17 and 18), the new roadways that would lead to the bridges in Work Nos. 13, 14 and 17, and the works to Islip station. Loss of openness at Water Eaton, due to the new aggregates depot and the new development for the park and ride facility (including the new station) would be offset by the gain in openness due to the removal of the grain silo and the existing aggregates depot. The other elements I have listed would be diffuse and individually modest, and I attribute slight weight to their overall effect on the openness of the Green Belt.
- 9.14.5 I therefore conclude that the Scheme would include inappropriate development in the Green Belt.

Whether The Harm By Reason Of Inappropriateness, And Any Other Harm, Is Clearly Outweighed By Other Considerations

- 9.14.6 For the reason given in paragraph 3.2 of PPG2, I attribute substantial weight to the harm to the Green Belt associated with the inappropriateness as development in the Green Belt of those parts of the Scheme I have so identified.
- 9.14.7 Other considerations also weigh against the Scheme, with the planning conditions I have identified:
- a) The loss of openness in the Green Belt, to which I have attributed slight weight [9.14.4].
 - b) The loss of an opportunity for increased recycling in the area consequent upon the use of the Grundon site for the scheme, to which I attribute substantial weight, in the light of the considerations set out in my paragraph 9.8.98.
 - c) Localised adverse visual effects associated with the bridges proposed at Tubbs Lane, Alchester Terrace and Mill Lane, to which (by virtue of the limited nature of such effects) I attribute modest weight [9.8.76].
 - d) The overall effect of the Scheme on cultural heritage and archaeology, to which I attribute moderate weight [9.8.85].
 - e) The loss of a small part of the Gavray Meadows county wildlife site, to which I attribute slight weight [9.9.32].

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- f) The permanent loss of some 15.19 hectares of the best and most versatile agricultural land [9.8.91]. Compensation would be payable to the owners but there would also be general harm, contrary to PPS7, arising from the loss of this agricultural resource. The area involved would be relatively small, and I attribute modest weight to the loss.
- 9.14.8 Among other considerations which, in my view, weigh neither for nor against the Scheme are:
- a) Localised changes in journey length consequent upon public level crossing closures which comply with section 5(6) of the Transport and Works Act;
 - b) Matters in respect of which compensation would be payable should any loss arise;
 - c) Matters in respect of which planning conditions are proposed so as to avoid harm;
 - d) The loss of open space at Tubbs Lane, which would be smaller than the limit below which the Acquisition of Land Act requires the provision of exchange land.
 - e) The absence of harm to availability of a rail aggregates depot [4.11.27] and the absence of other potential harms.
 - f) The Scheme would provide a sustainable alternative to the car, particularly for commuting journeys into Oxford. I have found that the Scheme would improve peak-hour traffic conditions, and reduce accidents, in the Oxford area in the 2016 assessment year [9.3.5 to 9.3.8, 9.3.15]. But those changes would be only slight, and there is no evidence that they would be maintained at other times of day – the evidence is that traffic flows would increase outside the peak hours at some locations [4.11.75].
 - g) Speculation about further development that parties consider might follow the application proposal [6.41.5]: it seems to me that the Scheme should be judged on its own merits.
- 9.14.9 Considerations which weigh in favour of the development include:
- a) It would increase rail capacity between Oxford and London, for which I am satisfied that a strong need exists [9.2.9]. The need is identified by the Great Western Route Utilisation Strategy March 2010 as an essential component of increased rail passenger capacity between Oxford and London [4.7.11]. For this reason I attribute very substantial weight to this effect of the Scheme.
 - b) In addition to the rail capacity increase, the Scheme would reduce travel time in many cases, and newly provide a direct service to High Wycombe from Oxford, Water Eaton and Islip [4.2.27]. Wycombe District Council expects significant transport and economic benefits to accrue in Wycombe District and Buckinghamshire [5.10.5]. I attribute at least moderate weight to these travel time benefits.
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- c) It would improve public transport connectivity (between bus and rail) and provide better access to the rail network for Oxford and north Oxfordshire. I attribute substantial weight to that, in the light of the considerations in my paragraphs 9.3.4 and 9.3.18.
- d) It would help Network Rail to maintain the rail network capability, and would allow alternative routes to be offered to train operators, particularly when works were under way on parallel routes [5.7.2]. I attribute at least modest weight to these benefits, that would be widely felt when they accrue.
- e) It would be likely to complement public policies for sustainable economic and spatial development, as supported by PPS1 and PPG13. But no development or public policy measure (other than those relating to the Scheme itself, or East West Rail) was identified that depended on the Scheme, and I give little credence to Chiltern's assessment of the wider economic benefits (for the reasons given). Wycombe District Council provides no assessment to support its view. [9.2.12, 9.3.10, 9.3.11, 5.10.5]. I therefore attribute no more than moderate weight to this consideration.
- f) The Scheme would reduce conflict between trains and other users of level crossings that the Scheme would close [9.3.17]. The evidence is that fatalities occur only very infrequently at level crossings (on average, about once every 650 years at each crossing) [8.2.7], and no evidence was brought of any higher risk at any level crossing affected by the Scheme. I therefore attribute only slight weight to risk reduction the Scheme would bring by closing level crossings.
- g) The Scheme would facilitate East West Rail, a scheme which is expected to come forward in due course, after the Scheme, but the benefits of which were before the Inquiry in only the broadest terms [4.3.2]. The claimed benefits of that Scheme are potentially substantial and I have found that the public interest lies with incorporation in the Scheme of some works that would be necessary if East West Rail were to proceed [9.13.2]. I attribute modest weight to the Scheme's contribution to East West Rail.
- h) The Scheme's southern terminus would be a contribution to the improvement of Oxford station, and I attribute moderate weight to that contribution.

9.14.10 Here I have applied the following categories, listed here in descending order of magnitude:

Very substantial

Substantial

Moderate

Modest

Slight.

- 9.14.11 I weigh the harm associated with the Scheme against the other considerations. The harm due to inappropriateness would be outweighed by the increased rail capacity. The loss of the recycling opportunity would be equal in weight to the improvement in public transport connectivity, and the harm to cultural heritage and archaeology would be equal in weight to the Scheme's contribution to sustainable economic and spatial development. The Scheme's visual harm would be outweighed by travel time improvements. The general harm arising from loss of best and most versatile agricultural land would be outweighed by the Scheme's improvements to Oxford station. The loss of openness in the Green Belt due to the Scheme would be outweighed by its wider rail network benefits. The loss of a small part of the Gavray Meadows county wildlife site would be outweighed by the Scheme's contribution to East West Rail. And there would be some improvement to safety at level crossings. In total, I am satisfied that the harm by reason of inappropriateness, and any other harm, would be clearly outweighed by other considerations.

Whether The Circumstances Are Very Special

- 9.14.12 The circumstances in this case are that a city of the size and calibre of Oxford would be provided with a necessary improvement to its rail connections to London and elsewhere while causing relatively little harm. The circumstances are very special.

- 9.15 **SM4 The extent to which the Scheme would be consistent with national and local planning, transport and environmental policies.**

National Planning and Environmental Policies

- 9.15.1 **PPS1 Delivering Sustainable Development:** There was no dispute that, by contributing to social progress, protecting the environment, making prudent use of natural resources and contributing to sustainable growth and employment, the Scheme would serve objectives of PPS1 [4.11.7]. The Planning and Climate Change Supplement to PPS1 encourages the use of sustainable transport [4.7.11], and the Scheme would be consistent with that.
- 9.15.2 **PPG2 Green Belts:** The Scheme would be, in part, in the Green Belt. I have concluded that the park and ride element of the Scheme would not be inappropriate development in the Green Belt [9.14.2]. Some other parts of the Scheme would be inappropriate development in the Green Belt. I have concluded that the harm by reason of inappropriateness, and any other harm, is clearly outweighed by other considerations so as to amount to the very special circumstances necessary to justify the development [9.14.11, 9.14.12]. The Scheme is therefore consistent with PPG2.
- 9.15.3 **PPS5 Planning for the Historic Environment:** The net effect of the Scheme on cultural heritage and archaeology would be slight to moderate harm (in the terms of the DMRB) [9.8.85]. There would be harm to the settings of some designated heritage assets, including the Islip Conservation Area, the Central Oxford Conservation Area and six

Grade II listed buildings; but the Scheme would not affect the positive contribution of those designated heritage assets to local character and sense of place and so would not conflict with that requirement of PPS5. The setting of the scheduled monument at Rewley Abbey Stream would be enhanced [4.11.61 - 4.11.64]. There would be some impacts on non-designated heritage assets [4.11.65 - 4.11.66]. Policy HE7 of PPS5 considers development that may affect heritage assets, and I take into account the matters identified there [9.14.7].

- 9.15.4 **PPS7 Sustainable Development In Rural Areas:** Subject to the conditions and reserved matters I have mentioned, I have found that the Scheme would cause no significant harm to the landscape in the countryside, apart from the localised effect of the bridge proposed at Mill Lane [9.8.76]. With that exception, the quality and character of the countryside would be enhanced. Some 15.19 hectares of the best and most versatile agricultural land would be lost [4.11.5b], and I take that into account [9.14.7].
 - 9.15.5 **PPS9 Biodiversity and Geological Conservation:** I have found that the Scheme would not be likely to have any adverse effect on the integrity of the Oxford Meadows SAC, having regard to the conservation objectives of the site [9.10.18, 9.10.21]. Where the Scheme would otherwise be likely to have an adverse effect on the notified special interest features of a site of special scientific interest, a condition is proposed to mitigate the harm [9.9.30]. The Scheme would provide mitigation measures for some protected species that the Scheme would affect [9.9.15 to 9.9.20] and other conditions are proposed for the protection of others [9.9.14, 9.9.21, 9.9.22]. In all those respects, the Scheme would comply with PPS9. The Scheme would also cause the loss of a small proportion of the Gavray Meadows county wildlife site [9.9.32], and I take that into account [9.14.7].
 - 9.15.6 **PPG13 Transport:** The Scheme would promote better integration between different transport modes. It would reduce the need to travel by car and increase the potential use of public transport. It would slightly reduce peak hour traffic but increase traffic at some other times. Nevertheless, on balance it is consistent with the direction of PPG13 [4.7.11, 4.7.23, 4.11.75].
 - 9.15.7 **PPG17 Planning For Open Space, Sport and Recreation:** I have found that the Scheme would affect open space only at Tubbs Lane, where 204.10 square metres would be lost [9.8.129, 9.8.126]. I take that into account [9.14.7].
 - 9.15.8 **PPS23 Planning and Pollution Control:** Compliance with PPS23 would be secured by condition [4.11.5e].
 - 9.15.9 **PPG24 Planning and Noise:** Subject to conditions, the Scheme would meet policy requirements for mitigation of noise and vibration [9.8.24, 9.8.37].
 - 9.15.10 **PPS25 Development and Flood Risk:** would be met [4.11.5g].
- Local Planning Policies**
- 9.15.11 The South East Plan identifies Oxford as a Regional Hub, to be supported by new multi-modal transport infrastructure [4.11.7], and the Scheme

would be consistent with that.

- 9.15.12 The Scheme, with the proposed conditions, would be consistent with policies in the adopted Cherwell Local Plan 1996 relating to Scheduled Monuments, nature conservation, protected species, the River Cherwell flood plain, landscape character, the open countryside, environmental pollution, water quality, flooding and contamination, and noise and vibration [4.11.6, 4.11.8]. The non-statutory Cherwell Local Plan 2011 supports railway-related uses at Bicester Town station and reserves land for a connecting railway and rail-based public transport interchange at Gavray Drive [4.7.12].
- 9.15.13 The Scheme, with the proposed conditions, would be consistent with policies in the Adopted Oxford Local Plan 2001-2016 that deal with scheduled monuments, features of ecological and geological importance, surface water, the need for Flood Risk Assessments, nuisance and noise [4.11.6, 4.11.8]. Policy TR10 expresses support for increases in the capacity of stopping train services in Oxford [4.7.12].
- 9.15.14 The Oxford Core Strategy 2026 Proposed Submission expresses support for East West Rail and improvements to the Bicester line, and increasing the capacity and function of Oxford station [4.11.9]. The Scheme is consistent with that emerging policy.

National Transport Policy

- 9.15.15 Development of the railway network is consistent with [4.7.11]:
- The European Commission's White Paper European Transport Policy for 2010: Time to Decide;
 - The Future of Transport: A Network For 2030;
 - The Future Of Rail;
 - The Eddington Transport Study;
 - Delivering A Sustainable Railway.
- 9.15.16 The Scheme is included in the Great Western Route Utilisation Strategy March 2010 as a committed project and an essential component of increased rail passenger capacity between Oxford and London [4.7.11].

Local Transport Policy

- 9.15.17 The South East Plan identifies the A34 corridor as a priority transport link. The South East Regional Economic Strategy seeks railway improvements in the A34 corridor [4.7.11].
- 9.15.18 The Oxfordshire Local Transport Plan covered the period to March 2011. It specifically supported the Scheme, and its replacement was expected to do the same [4.7.12].

Conclusion

- 9.15.19 The Scheme, with the planning conditions identified in this report, would be consistent with the overall direction of national and local planning and environmental policies and any harm to the objectives of individual policies would be more than outweighed by the Scheme's overall benefits. It would be consistent with relevant elements of national and local transport policies.

- 9.16 SM12 **The conditions proposed to be attached to deemed planning permission for the Scheme, if given, and in particular whether those conditions meet the tests of DoE Circular 11/95 *The Use of Conditions in Planning Permissions* of being necessary, relevant, enforceable, precise and reasonable.**
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- 9.16.1 I have considered the representations made regarding possible planning conditions, whether in writing or in examination or at the session of the Inquiry during which conditions were discussed
- 9.16.2 In the light of representations made and having regard to other matters in this report, I have set out in the first Appendix to this report the conditions which I consider should be attached to deemed planning permission for the Scheme, if given.
- 9.16.3 With regard to those recommended conditions:
- a) Some suggested conditions refer to "stakeholders", a term which lacks precision and which I do not recommend to form part of any condition.
 - b) Condition 6 extends to allotment holders at Trap Ground the safety and amenity protection afforded by Chiltern's corresponding draft condition to occupiers of residential and commercial premises and users of the highway.
 - c) In conditions 12 and 13, AP17 Aristotle Lane is omitted in the light of my recommendation regarding the level crossing.
 - d) A condition was proposed that would regulate the throughput of the aggregates depot [4.11.93]. There was no evidence that road traffic associated with use of the depot would have any identifiable adverse effect [6.55.39], and so I am not persuaded that such a condition is necessary.
- 9.16.4 I am satisfied that the conditions I recommend would meet the tests in the Annex to Department of the Environment Circular 11/95 of being necessary, relevant to planning and to the development to be permitted, enforceable, precise and reasonable.

- 9.17 SM14 **Whether there is a compelling case in the public interest for conferring on Chiltern Railways powers compulsorily to acquire and use land for the purposes of the Scheme, having regard to the guidance on the making of compulsory purchase orders in ODPM Circular 06/2004, paragraphs 16 to 23; and whether the land and rights in land for which compulsory acquisition powers are sought are required by Chiltern Railways in order to secure satisfactory implementation of the Scheme.**
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a) Public Interest

- 9.17.1 Circular 06/2004 *Compulsory Purchase And The Criche Down Rules*, issued by the Office of the Deputy Prime Minister, was before the Inquiry

as document CD/5.19. If the compulsory purchase of land is to be authorised, then Government guidance as set out in paragraphs 16 to 23 of the Memorandum to Circular 06/2004 is that:

- i) There should be a compelling case in the public interest, that sufficiently justifies interfering with the human rights of those with an interest in the land affected (with particular regard to the provisions of Article 1 of the First Protocol to the European Convention on Human Rights and, in the case of a dwelling, Article 8 of the Convention);
- ii) The acquiring authority should have a clear idea of how it intends to use the land which it is proposing to acquire;
- iii) Sufficient resources should be available to complete the compulsory acquisition within the statutory period following confirmation of the Order and to implement the Scheme; and,
- iv) There should be a reasonable prospect of the Scheme going ahead and it should be unlikely to be blocked by any impediment to implementation.

Item i)

- 9.17.2 I have found that the Scheme, if subject to the planning conditions I recommend, would bring benefits that would clearly outweigh the harm it would bring [9.14.11].
- 9.17.3 Two parties with interests in the land that would be compulsorily purchased made representations regarding human rights, with particular regard to the provisions of Article 1 of the First Protocol to the European Convention on Human Rights or Article 8 of the Convention:
- a) The Honour family (Objs 44, 45 and 46) consider insufficient the evidence to justify interfering with their human rights by way of property ownership [6.47.3 e)]. In the light of my general finding [9.17.2], and Chiltern's undertaking regarding plot 12002 and part of plot 11009 [8.12.2], I am satisfied that if the Scheme were to proceed the proposed acquisition of the Honour family's land and interests in land would be in the public interest.
 - b) Mr and Mrs Honour (Obj 185) consider insufficient the evidence to justify interfering with their human rights by way of property ownership [6.55.44]. I am satisfied that, if it were to proceed, the construction and operation of the Scheme would be in accordance with the law and would be in the interest of the economic well-being of the country, and in the public interest. I am also satisfied that, subject to the planning conditions I propose, the Scheme would have an acceptable effect at the property that would be proportionate to the benefits it would bring.
- 9.17.4 Dr Robertson is not a statutory objector. She cites Article 8 and draws attention to the effects the Scheme would have at her property by virtue of noise and air pollution [6.20.30]. I am satisfied that, if it were to proceed, the construction and operation of the Scheme would be in accordance with the law and would be in the interest of the economic

well-being of the country. I am also satisfied that, subject to the planning conditions I propose, the Scheme would have an acceptable effect at the property that would be proportionate to the benefits it would bring.

- 9.17.5 However, there are elements of the proposed acquisition for which a compelling case in the public interest has not been found. They are:
- a) The Blue Land (shown on the Open Space Plan; parcels 01001, 01002, 01012 and 01013). This interest is proposed to be acquired as exchange land for land to the west of Charbridge Lane and land to the north of Gavray Drive claimed as open space, but I have found that land to be not open space [9.8.120 and 9.8.125] and so exchange land is not necessary in that respect.
 - b) The land and interests that the Scheme would acquire on Port Meadow. Chiltern no longer argues for parcels 29008, 29015, 29016, 29017 and 29018 [8.23.1, 4.5.33]. Additionally I have found that the Aristotle Lane level crossing should not be closed [9.13.32]. The interest Chiltern now seeks in Port Meadow would be needed in order that permanent works could be carried out there, associated with the closure of the level crossing; but, in view of my finding regarding the level crossing, those works would not be necessary. There is therefore no compelling case in the public interest for the acquisition of interests on Port Meadow – which (also including those for which Chiltern no longer argues) includes parcels 29008, 29009, 29010, 29011, 29012, 29015, 29016, 29017 and 30009.
 - c) The land and interests that the Scheme would acquire for East West Rail, other than on the basis that to carry out advance works for East West Rail would be in the public interest. Such a case is put for much of Phase 2b of the Scheme [4.3.12] and the Secretary of State has agreed to contribute to the cost of those in Phase 2A [4.1.14]. Insofar as such works would avoid disruption of rail services on the Scheme at a later date, I am satisfied that the public interest would be indeed served by such an approach [9.13.2]. But that is not universally the case [9.13.3]. The works affecting the A41 bridge would be part of the Phase 2B proposals, implemented at a later date; as would the land needed for more parking at Islip station [4.5.38, 4.5.39]. Very little evidence of the benefits that East West Rail would bring was before the Inquiry (nor any of any possible harm, or the lack of it), and I do not find the evidence sufficiently robust to justify a finding that there is now a compelling case in the public interest for the compulsory purchase of land and interests that will not be needed or acted upon in any way unless East West Rail is authorised [4.5.41]. The parcels in question are as follows:
 - i) For the A41 bridge: 04055, 04052, 04053, 04036, 04037, 04038, 04039, 04041, 04042, 04043, 04044, 04045, 04046, 04047, 04048, 04049, 04050, 04056,

04a001, 04a002.

- ii) At Islip Station: 18009.
- d) Chiltern now considers that Plots 04026 and 04028 should be modified as described in document CRCL/INQ/79, as agreed with the owners of the land [8.24.1].

Item 2

- 9.17.6 I am satisfied that the acquiring authority has a clear idea of how it intends to use the land which it now proposes to acquire.

Item 3

- 9.17.7 I am satisfied that sufficient arrangements have been made for funding Phases 1 and 2A of the project [9.5.4]. This would include preparatory works.
- 9.17.8 Funding for Phase 2B is not expected to become available until 2014, whereas the Scheme was expected at the Inquiry to come into use in May 2013 [9.5.5]. The making available of those resources would depend on approval of East West Rail, itself expected to follow a public inquiry [4.1.15, 4.3.10]. Notwithstanding the hopes of the promoters of East West Rail [4.3.7], the resources needed for Phase 2B are not yet available and might not be provided. It has not been confirmed that sufficient resources are available to implement Phase 2B of the Scheme at the A41 bridge and at Islip station.

Item 4

- 9.17.9 It seems to me that two impediments remain.
- 9.17.10 The first is confined to Phase 2B, and is that there is no assurance that funds for that work will become available. This is an impediment to those parts of the Scheme associated wholly with Phase 2B, and would apply to those parcels of land identified in my paragraph 9.17.5 c).
- 9.17.11 The second relates to a licence or licences that would be issued in respect of bats under The Conservation Of Species And Habitats Regulations 2010 ("a Licence"). There is no dispute (and I do not disagree) that a Licence would be needed for the construction works planned in Wolvercot Tunnel [9.9.11]. (A Licence might also be needed for the bat mitigation scheme proposed by Chiltern at the Inquiry [9.9.12].) Natural England had been consulted on the proposals, and opined that an application based on the information before the Inquiry would be likely to fail, for the reasons given [9.9.13]. This would be an impediment to implementation of the Scheme.
- 9.17.12 The evidence before the Inquiry was therefore that the Scheme is likely to be blocked, in part by the lack of timely assurance of funding for Phase 2B (an impediment that would fall away if the land and interests identified in paragraph 9.17.5c were excluded from the Order); and in whole by the lack of a Licence.

Conclusions On The Conferral Of Compulsory Purchase Powers

- 9.17.13 There is a compelling case in the public interest, that sufficiently justifies interfering with the human rights of those with an interest in the land affected, in respect of the land and interests that are proposed to be

acquired, other than the land and interests identified in paragraph 9.17.5.

- 9.17.14 There is not a compelling case in the public interest for the compulsory acquisition of the land and interests identified in paragraph 9.17.5 (for the reasons given in that paragraph).
- 9.17.15 The acquiring authority has a clear idea of how it intends to use the land it proposes to acquire.
- 9.17.16 Sufficient arrangements have been made for funding Phases 1 and 2A of the project.
- 9.17.17 It has not been confirmed that sufficient resources are available to implement Phase 2B of the Scheme at the A41 bridge and at Islip station.
- 9.17.18 The likely lack of a Licence in respect of bats, issued under The Conservation Of Species And Habitats Regulations 2010, is an impediment to the implementation of the Scheme, since it would render illegal the carrying out of works in Wolvercot Tunnel. To confer on Chiltern compulsory purchase powers while such an impediment is likely would be contrary to the advice of Circular 06/2004.

9.18 **Conclusion on the Order**

- 9.18.1 By virtue of my finding in paragraph 9.17.18 of this report, I conclude that The Chiltern Railways (Bicester to Oxford Improvements) Order 201[X] should not be made.
- 9.18.2 Should the Secretary of State conclude otherwise, then it would in my view be appropriate that the published draft Chiltern Railways (Bicester to Oxford Improvements) Order 201[X] (Inquiry Document CD/1.2), the Book of Reference, the Deposited Plans and Sections and the Planning Direction Drawings should be modified as I describe in the following paragraph, and the Order then made.
- 9.18.3 The modifications referred to in the previous paragraph are:
- 1 Modifications To The Draft Order
- 1a) The deletion of references to the parcels of land identified by reference number in paragraph 9.17.5a) to 9.17.5c) of this report;
- 1b) The deletion of Aristotle Lane Crossing from Schedule 9 Part 2 [9.13.32]; and
- 1c) So far as they do not conflict with 1a) and 1b) in this paragraph, the modifications to the Draft Order proposed by Chiltern [9.6.1 to 9.6.5, 9.17.5d)].
- 2 Modifications to the Book of Reference
- 2a) The deletion of references to the parcels of land identified by reference number in paragraph 9.17.5 a) to 9.17.5c) of this report;

- 2b) So far as they do not conflict with 2a) in this paragraph, the modifications to the Book of Reference proposed by Chiltern [9.6.1 to 9.6.5, 9.17.5d)].

3 Modifications to the Deposited Plans and Sections

- 3a) The deletion of references to the parcels of land identified by reference number in paragraph 9.17.5 a) to 9.17.5c) of this report;
- 3b) So far as they do not conflict with 3a) in this paragraph, the modifications to the Deposited Plans and Sections proposed by Chiltern [9.6.1 to 9.6.5, 9.17.5d)].

4 Modifications to the Planning Direction Drawings

- 4a) Alteration of the planning application boundary to exclude the parcels of land identified by reference number in paragraph 9.17.5 a) to 9.17.5c) of this report;
- 4b) So far as they do not conflict with 4a) in this paragraph, the modifications to the Planning Direction Drawings proposed by Chiltern [9.6.1 to 9.6.5, 9.17.5d)].

9.19 Conclusions on the Exchange Land Certificate

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- 9.19.1 No exchange land certificate will be needed if my conclusion on the Order is accepted [9.18.1].
- 9.19.2 In the event that my conclusion on the Order is not accepted, and the Order is modified and then made, the following considerations would apply with reference to the published Exchange Land Certificate (document CD/1.25a).
- 9.19.3 Part 1 of the First Schedule to the Public Notice identifies land at Gavray Drive (plots 01004, 01011, 02003, 02007, 03002, 03005). I have found that this land is not open space [9.8.120, 9.8.125]. Therefore, no certificate would be needed in respect of this land. The Second Schedule would therefore be otiose.
- 9.19.4 Part 2 of the First Schedule to the Public Notice identifies land at Tubbs Lane. The land is open space, and its extent is less than 209 square metres [9.8.126]. There was no contention that the giving in exchange of other land was other than unnecessary. Therefore, none would need to be given.
- 9.19.5 Parts 1 and 2 of the Third Schedule to the Public Notice identify land at Aristotle Lane and Port Meadow. In the light of its changed proposals, Chiltern no longer seeks a certificate in respect of this land [8.26.1]. It would therefore be appropriate to delete the Third Schedule.
- 9.19.6 It would therefore be appropriate to issue a certificate in respect only of the land at Tubbs Lane, as identified in Part 2 of the First Schedule to the published Notice.

9.20 **Conclusion on Deemed Planning Permission**

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- 9.20.1 I have found that the Scheme, with the planning conditions identified in this report, would be consistent with the overall direction of national and local planning and environmental policies and any harm to the objectives of individual policies would be more than outweighed by the Scheme's overall benefits. It would be consistent with relevant elements of national and local transport policies [9.15.19].
- 9.20.2 Section 90(2A) of the Town and Country Planning Act 1990 would allow the Secretary of State for Transport, on making the Order, to direct that planning permission for the Scheme be deemed to be granted, subject to conditions (if any).
- 9.20.3 Deemed planning permission should not be given if my conclusion on the Order is accepted [9.18.1].
- 9.20.4 In the event that my conclusion on the Order is not accepted, and the Order is modified and then made, then it would be appropriate for a direction to be issued that planning permission for the Scheme shall be deemed to be granted, subject to the conditions set out in Appendix 1 to this report.

10 **RECOMMENDATIONS**

- 10.1 I recommend that the Order should not be made, no Open Space Certificate should be issued and no Planning Direction should be given.

J.P. Watson

INSPECTOR

APPENDIX 1 – RECOMMENDED PLANNING CONDITIONS

1. Time For Commencement

The development hereby permitted shall commence before the expiration of 5 years from the date of the Deemed Planning Direction.

Reason: To comply with the Town and Country Planning Act 1990.

2. Approved Drawings

The development shall be carried out in accordance with the following approved drawings:

In Inquiry Document CD/1.9 “Deposited Plans and Sections and Open Space Plan” as modified (Inspector’s report reference 9.18.3 paragraphs 2a and 2b), sheets 1 to 38 inclusive.

In Inquiry Document CD/1.13 “Planning Direction Drawings” as modified (Inspector’s report reference 9.18.3 paragraphs 4a and 4b), sheets 1 to 31 inclusive.

Reason: To define the permission.

3. Development Sections

No development shall commence until a scheme (which may be amended or varied in whole or part from time to time with the approval of the local planning authority) setting out the division of the development into Individual Sections has been submitted to and approved by the local planning authority. The scheme shall include details of all land to be occupied permanently or temporarily during the construction of each section.

Reason: To identify Individual Sections for the purpose of these conditions.

4. Notification

Written notification shall be given to each local planning authority immediately on commencement of the development, immediately a passenger rail service is resumed on each Individual Section and immediately Phase 2B of the Scheme is brought into use.

Reason: These milestones are referred to in other Conditions.

5. Design, external appearance and materials

The design, layout and appearance and external materials of the stations and the bridges shall conform generally to those set out in the Revised Design and Access Statement January 2011, which is Inquiry Document CD/1.19/1.

No works in respect of the items listed below shall be commenced until details of the layout, scale, appearance and external materials of that item have been submitted to and approved in writing by the local planning authority. Development shall accord with the approved details.

Item (a): The station buildings, platforms, footbridge and canopies at Bicester Town Station.

Item (b): The at-grade car parks, vehicular and pedestrian access arrangements at Bicester Town Station.

Item (c): The car park deck at Bicester Town Station.

Item (d): The Phase 1 extended platform and waiting facilities at Islip Station.

Item (e): The Phase 2B platforms, waiting facilities, footbridge, pedestrian ramp and any new car parking provision at Islip Station.

Item (f): The station buildings, platforms, footbridge, and waiting facilities at Water Eaton Parkway Station.

Item (g): The at-grade car parks, vehicular and pedestrian access arrangements at Water Eaton Parkway Station.

Item (h): The car park deck at Water Eaton Parkway Station.

Item (i): The layout of the vehicular access road to the rail aggregates depot and car park at Water Eaton Parkway Station.

Item (j): The station buildings, platforms and waiting facilities at Oxford station.

Item (k): Any alterations to vehicular and pedestrian access arrangements at Oxford station.

Item (l): Each individual foot, bridleway or vehicular bridge which is new or is to be substantially reconstructed (where described as a numbered Work in Schedule 1 to the Order).

Item (m): The layout of the vehicular road from Wendlebury Road to Langford Lane, intended to replace the Langford Lane level crossing.

Item (n): Any other building that is to be greater than 25 square metres footprint.

Item (o) any buildings, fixed structures, hardstandings, weighbridges and other fixed plant, and railway sidings to be provided on the aggregates depot at Water Eaton Parkway.

Reason: To enable proper control to be exercised over the design of the development.

6. **Implementation and Maintenance of Railway Fencing**

The railway, including any construction sites, shall remain securely fenced at all times during construction and any temporary fencing shall be removed on completion.

No Individual Section of the development shall commence until details of the appearance, size and location of any proposed new permanent boundary fencing, including noise barriers or other means of enclosure, which abuts a highway, residential or commercial land or premises within that Section of the development, and including the level crossing of the Scheme to serve the Trap Ground allotments, have been submitted to and approved by the local planning authority. Any approved new

permanent boundary fencing shall be erected before the adjacent Section of the railway is brought back into use for passenger services. All permanent boundary fencing shall be maintained so as to retain its approved appearance unless otherwise approved in writing by the local planning authority.

Reason: To protect the safety of residents, occupiers and highway users and to maintain the appearance of the railway.

7. Landscaping

1. No later than six months after the commencement of the Individual Section of the development to which it relates, a landscaping scheme, covering the locations where landscaping will be undertaken mentioned in paragraph 2 of this condition shall be submitted to the local planning authority for approval. That scheme shall include the details of:

- (a) any structures, such as street furniture, fencing and lighting, save those which are to be approved under condition 6;
- (b) all existing trees with a diameter of 100mm or more, and all hedges, to be retained and to be removed.
- (c) any trees or shrubs to be planted, including the location, number, species, size and planting density;
- (d) any earth screen bunds to be provided on the south and east boundaries of the replacement rail aggregates depot; and
- (e) any other soft landscaping.

2. The locations at which landscaping will be undertaken are: (a) the vicinity of the Bicester Town Station on both sides of the railway;

- (b) Tubbs Lane;
- (c) in the vicinity of Work Nos. 11, 12, 13, 14 and 15;
- (d) at Islip Station;
- (e) in the vicinity of Work Nos. 6, 16, 17 and 18;
- (f) at the Water Eaton Parkway Station and the aggregates depot;
- (g) in the vicinity of Rewley Abbey Stream (also known as Sheepwash Channel) Bridge; and
- (h) at Oxford station.

Species of trees and shrubs to be planted close to the railway shall accord with the schedules of acceptable species set out in Appendix 8 to the Network Rail Biodiversity Action Plan 2004 submitted to the Inquiry as Annex A of document CD/1.12/4.

Reason: To ensure appropriate landscaping of the development.

8. Implementation and Maintenance of Landscaping

All landscaping works shall be undertaken in accordance with the appropriate landscaping scheme, approved under Condition 7. Unless otherwise agreed by the local planning authority, planting shall take place no later than the first available planting season after the completion of the adjacent buildings and hard surfaced areas. Written notice shall be served on the local planning authority, within three

months of the event, of the date of planting at each location identified in Condition 7. Any tree or shrub planted as part of an approved landscaping scheme that, within three years of the date of planting, is removed, dies or becomes, in the opinion of the local planning authority, seriously damaged or seriously diseased, shall be replaced in the first available planting season with a specimen of the same species and size as the original planted, unless otherwise agreed by the local planning authority.

Reason: To ensure satisfactory implementation of the landscaping.

9. **Archaeology**

The development shall not commence in respect of any Individual Section until a Written Scheme for the Investigation (WSI) of archaeological potential within that Section has been submitted to and approved by the local planning authority and such elements of that WSI as the local planning authority considers necessary before commencement of development have been implemented. The WSI shall provide for a programme of further detailed walk-over surveys and document studies of the route within the relevant limits; non-intrusive and intrusive investigation before construction is commenced in any location where this is necessary; protection of remains, where these are to remain in-situ; watching briefs during construction, where these are necessary; the photographic recording of structures, in particular the Mill Stream and Cherwell viaducts and the Grain Silo; preservation of finds and publication of the results of the investigation. Development shall take place in accordance with the approved WSI.

Construction of the replacement road from Wendlebury Road to Langford Lane and the bridge over the railway (being Work No 11) shall not commence until details of the measures to avoid (including minor realignment of the road within limits), protect (including raising the road where necessary to protect remains) and record archaeological remains have been submitted to and approved by the local planning authority, in consultation with English Heritage, the Oxfordshire County Council Archaeologist and the Environment Agency, and the approved field evaluation has been completed.

Reason: To ensure adequate protection and recording of historic features and archaeological remains.

10. **Protection and Enhancement of the Setting of the Swing Bridge at Rewley Abbey Stream.**

No development shall commence on the railway bridge across the Rewley Abbey Stream (otherwise the Sheepwash Channel) until a scheme for the protection of the Swing Bridge, which is a Scheduled Monument, and the improvement of fencing and footpaths around the Scheduled Monument has been submitted to and approved by the local planning authority, in consultation with English Heritage and the Oxford Preservation Trust.

Development shall be in accordance with the approved scheme.

Reason: To ensure the protection of the bridge during construction and to assist in the enhancement of the setting of the Swing Bridge.

11. **Contaminated Land**

No development shall commence in relation to the Bicester Town, Islip, Water Eaton Parkway or Oxford station works or at the sites of the proposed bridges, culverts or other below ground structures, until a scheme to establish the presence or otherwise of, assess and, if necessary, remediate contamination at that location, which is likely to cause significant harm to persons, pollution of controlled waters or the environment within that section has been submitted to and approved by the local planning authority, in consultation with the Environment Agency. The scope of that scheme shall include a review of all of the potentially contaminated sites shown in Figures 15.1A to 15.1Q in the Environmental Statement Volume 3 (Inquiry document CD/1.17), where below ground works are to take place.

All remedial measures shall be undertaken before development at that location is commenced, unless otherwise agreed by the local planning authority.

If, during development, contamination not previously identified is found to be present on the site, no further construction shall be undertaken at that location, unless otherwise agreed by the local planning authority, until a scheme to assess and remediate that contamination, to the extent necessary, has been submitted to and approved by the local planning authority, in consultation with the Environment Agency.

Upon completion of the approved remedial measures at each location, a verification report that demonstrates that the agreed remediation has been completed and whether the necessary degree of decontamination has been achieved, and setting out any necessary further works, longer term monitoring and maintenance required, shall be submitted to the local planning authority and the Environment Agency. Any necessary further works, once approved in writing by the local planning authority, shall be carried out and the remediation and confirmation process repeated until the local planning authority has issued written confirmation that it is satisfied that the necessary degree of decontamination has been achieved.

Reason: To ensure that any necessary remediation is undertaken.

12. **Flood Risk Assessment**

The development shall be undertaken in accordance with the Revised Level 2 Flood Risk Assessment, dated July 2010. No construction of any one of the following elements of development (as identified in the Level 2 Flood Risk Assessment Revised July 2010 (Inquiry document CD/2.22) unless stated otherwise here) shall commence until a Level 3 Flood Risk

Assessment of that element, suitable to the scale and nature of that element, has been submitted to and approved in writing by the local planning authority, in consultation with the Environment Agency:

AP1 Bicester Chord.

AP3 Bicester Town station.

AP4 A41 overbridge.

AP6 Elm Tree Farm/Langford Lane Overbridge (modified to accord with the revised proposal shown on Revised Sheets 8b, 35 and 37 of the Deposited Plans and Sections (Inquiry Document CD/1.28)).

AP7 Merton footbridge.

AP13 Water Eaton No 5 overbridge.

AP18 the Rewley Abbey Stream bridge.

The Level 3 Flood Risk Assessments shall follow the methodology set out in the Flood Storage and Compensation Technical Note, dated July 2010, agreed by the Environment Agency. Each Flood Risk Assessment shall demonstrate that this particular element of the development, or as taken together with other works in the same catchment will not increase flood risk through alterations to fluvial flood flows or reduction in fluvial flood water storage.

Development shall be in accordance with the approved Flood Risk Assessment.

Reason: To prevent the increased risk of flooding through an appropriate hierarchy of flood risk management.

13. **Surface Water Drainage Assessment**

No construction of any one of the following elements of development shall commence until a surface water drainage assessment and scheme for that element (as identified in the Level 2 Flood Risk Assessment Revised July 2010 (Inquiry document CD/2.22) unless stated otherwise here) has been submitted to and approved by the local planning authority, in consultation with the Environment Agency:

AP1 Bicester Chord.

AP2 Tubbs Lane footbridge.

AP3 Bicester Town station.

AP4 A41 overbridge.

AP6 Elm Tree Farm/Langford Lane Overbridge (modified to accord with the revised proposal shown on Revised Sheets 8b, 35 and 37 of the Deposited Plans and Sections (Inquiry Document CD/1.28)).

AP7 Merton footbridge.

AP8 Holts Farm overbridge.

AP9 Oddington Footbridge No 5.

AP10 Oddington overbridge.

AP11 Islip station in Phase 1.

AP11 Islip station in Phase 2.

AP13 Water Eaton No5 overbridge.

AP14 Water Eaton Parkway.

AP15 Gosford and Water Eaton Footbridge No 10.

AP18 Sheepwash Bridge.
AP19 Oxford station.

The surface water drainage assessments shall follow the methodology set out in the Scope of Surface Water Drainage Assessment, July 2010, agreed by the Environment Agency. Each surface water drainage assessment shall demonstrate that surface water discharge rates and volumes from that element of the development will not increase flood risk, or taken together with other relevant works in the same catchment, can be maintained at or below the agreed limits, using sustainable drainage techniques.

Development shall be in accordance with the approved surface water drainage assessment and scheme.

Reason: To improve and protect water quality and ensure the provision and maintenance of adequate surface water drainage systems.

14. **Safe Access and Egress under Flood Conditions**

The level crossings at Mill Lane, Islip and Langford Lane and the Northfield Farm accommodation bridge shall not be closed permanently until a detailed assessment of any increase in flood hazard, in particular, the safe access and egress of residents of properties in Mill Lane and Mill street, Islip; Alchester House and Bramlow, Langford Lane and Northfield Farm or any other residential properties in the vicinity of each of these crossings and details of such mitigation measures as are practicable have been submitted to and approved by the local planning authority in consultation with the Environment Agency.

Development shall be in accordance with the approved assessment and details.

Reason: To ensure that appropriate measures are taken to maintain safe access to residential properties under severe flood conditions.

15. **Water Pollution Control**

In carrying out the development, all reasonable steps shall be taken to prevent the pollution of watercourses and groundwater, including the following:

(a) no contaminated material, or polluting construction or demolition material or refuse, shall be deposited within the Order limits;

(b) no water from the construction areas shall be permitted to discharge to any watercourse, well, spring or soakaway, if it is contaminated with foul sewage, suspended soil or other pollutant;

(c) the details of the design and construction of any storage facilities for oils, fuels or chemicals shall be submitted to and approved by the local planning authority before that facility is installed; and,

(d) no water shall be permitted to discharge into or onto contaminated land.

Reason: To ensure that pollution of watercourses and groundwater is prevented

16. **Protection of National and European Designated Sites During Construction of the Scheme**

No development shall commence within any Individual Section that passes within 500 metres of the European designated site, the Oxford Meadows Special Area of Conservation (SAC), or any of the following Sites of Special Scientific Interest, namely:

(i) The Port Meadow with Wolvercote Common and Green SSSI;

(ii) The Wendlebury Meads and Mansmoor Closes SSSI; and,

(iii) The Hook Meadows and Trap Grounds SSSI,

until a Method Statement detailing the methods and materials to be used in the construction and mitigation works to be employed on that Section of the development so that the works comprised in that Section shall not adversely affect the nature conservation interest of any designated site and its reasons for designation, has been submitted to and approved by the local planning authority, in consultation with Natural England.

Insofar as it would affect the Oxford Meadows Special Area of Conservation, the method statement shall incorporate, among any other necessary details, details of controls in respect of dust management, water pollution control and changes to groundwater levels.

The works shall be carried out as approved.

Reason: To ensure that the Special Area of Conservation and the Sites of Special Scientific Interest are properly protected during construction of the Scheme.

17. **Restoration of Land Used Temporarily for Construction**

Any land which is used temporarily for construction shall be restored to its former condition, or such condition as the local planning authority may approve, within one year of completion of the permanent works. No such land shall be entered for construction purposes or disturbed until the local planning authority has given written confirmation that it has received a record of the prior condition of the land sufficient for the purpose of this condition.

Reason: To protect amenity and restore landscape and habitats.

18. **Code of Construction Practice**

No development shall commence until a Code of Construction Practice, which shall cover all matters specified in the Code of Construction Practice Revision 2 Draft (Inquiry Document CD/1.24), has been

submitted to and approved by the local planning authorities, in consultation with the Environment Agency.

Additionally, in the Code of Construction Practice:

- (a) Noise limits shall be set in a way that recognises the noise context and is consistent with Annex E of British Standard BS 5228-1:2009 *Code of Practice for Noise and Vibration Control on Construction and Open Sites, Part 1: Noise*.
- (b) Arrangements shall be established whereby the approval of the local planning authority shall be secured to the list of properties (referred to in section 4.10 of Inquiry Document CD/1.24) which may be at risk of damage from ground movement caused by the works, and that no works shall take place in any Individual Section until such a list has been so approved in respect of that Individual Section.

Development shall be in accordance with the approved Code of Construction Practice.

Reason: To protect residents and amenity during construction.

19. **Operational Noise and Vibration Monitoring and Mitigation**

1. Operational noise and vibration monitoring and mitigation shall be carried out in accordance with the Noise and Vibration Mitigation Policy January 2011 (Inquiry document CD/1.29/2, referred to in this condition as "the Policy") and this condition. In the event of any conflict between the two, this condition shall prevail.

2. Development shall not commence within each Individual Section, until a detailed scheme of assessment of predicted noise impacts during operation of Phase 1 and 2A of the railway works, predicted vibration effects of the railway with Phases 1, 2A and 2B and details of proposed monitoring and mitigation measures, has been submitted to and approved by the local planning authority.

3. The schemes of assessment of the predicted noise impacts of Phase 1 and 2A and of Phase 2B on the Individual Section or Sections that abut Wendlebury Gate Stables shall also identify measures that should be taken to ensure that the noise caused by individual passing trains does not impede voice communication over a distance of 30 metres within either the "large riding school" or the "small riding school", both at Wendlebury Gate Stables, or within the paddock opposite Bramlow.

4. The schemes of assessment of the predicted noise impacts of Phase 1 and 2A and of Phase 2B on the Individual Section or Sections that abut 45 Lakeside shall also identify measures that shall be taken to ensure that the noise caused by individual passing trains is not audible in the studio at 45 Lakeside.

5. Where vibration mitigation measures required for Phase 2B can be installed most cost-effectively during the Phase 1 and 2A works, this shall be done. All mitigation measures, including those prescribed in the Noise Insulation (Railways and Other Guided Transport Systems) Regulations 1996, required for Phase 1 and 2A shall be installed as soon as possible after commencement of the works and no later than the date on which a passenger rail service is resumed on that Section of railway.

6. Any monitoring of noise and vibration shall be undertaken in accordance with the approved scheme of assessment and the Policy.

7. Before the commencement of the laying of the second track between the MoD Depot at Bicester and Islip a detailed scheme of assessment of the predicted noise impacts arising from the works and from the additional services assessed as likely to operate under Phase 2B in the Environmental Statement and details of proposed mitigation measures (modified as necessary in the light of subsequent forecasts which led to the approval of East West Rail for construction), which achieve the standards for noise and vibration attenuation set out in the Policy shall be submitted to and approved by the local planning authority.

8. Any vibration mitigation measures not already installed during the Phase 1 and 2A works necessary for Phase 2B shall be installed. All mitigation measures, including those prescribed in the Noise Insulation Regulations (Railways and Other Guided Transport Systems) 1996, required for Phase 2B shall be undertaken as soon as possible after commencement of the works and completed no later than the date on which the second track is brought into use.

9. The submitted schemes of assessment shall show how the standards of noise mitigation set out in the Policy will be achieved. Supporting calculations, or printouts of inputs and outputs from recognised computer software, shall be provided. Each scheme shall be accompanied by a report, prepared by an independent expert previously approved by the local planning authority, on the robustness of the noise-related elements of the scheme of assessment. Noise mitigation measures shall be permanently installed as approved.

10. The submitted schemes of assessment shall show how the standards of vibration mitigation set out in the Policy will be achieved. Supporting calculations or empirical data, or a combination of the two, shall be provided. Each scheme shall be accompanied by a report, prepared by an independent expert previously approved by the local planning authority, on the robustness of the vibration-related elements of the scheme of assessment. Vibration mitigation measures shall be permanently installed as approved.

11. The submitted schemes of assessment shall include a list of properties assessed and the results of the assessment at each. By the times the mitigation measures are due to be brought into use, notice shall be served on the local planning authority of the mitigation measures that have been installed for each property assessed.

12. The situation may arise in which Chiltern finds “not reasonably practicable” the provision of mitigation measures that otherwise would be required by the Policy. In such circumstances, the mitigation measure or an equally effective substitute previously approved by the local planning authority shall be installed in the timescale set out in item 1.10 of the Policy, unless the local planning authority has confirmed, in writing, its agreement that the mitigation in question is not reasonably practicable and that there is no suitable substitute.

13. Where noise barriers are promoted in an approved scheme of assessment, they shall be installed only once the local planning authority has given written approval of their size, appearance and location. Noise barriers shall be maintained in their approved form and may be removed only with the written approval of the local planning authority.

14. Development shall be in accordance with the approved schemes.

Reason: To ensure that operational noise and vibration are adequately mitigated at residential and other noise sensitive premises.

20. **Aggregates Depot Rail Use**

Following the completion of construction, aggregates shall only be brought onto the aggregates depot site at Water Eaton by rail.

Reason: To promote the sustainable transport of minerals by rail.

21. **Existing Aggregates Depot**

Use of the existing aggregates depot shall cease once the new aggregates depot comes into use, and its site shall be promptly cleared to ground level in preparation for the Water Eaton Parkway station.

Reason: To limit inappropriate development in the Green Belt, and to avoid harm to the landscape.

22. **Height of Stored Aggregates**

The height of any stockpiles of stored aggregates at the aggregates depot shall not exceed 8 metres above rail level.

Reason: To protect the visual amenity of the area and maintain the openness of the Green Belt.

23. **Aggregates Depot Floodlighting**

No floodlighting shall be erected or used on the new aggregates depot site, except in accordance with a scheme submitted to and approved by the local planning authority.

Reason: To limit light spill and protect the visual amenity of the area.

24. **Aggregates Depot Hours of Operation**

No HGVs shall enter or leave the aggregates depot, nor shall unloading of trains or loading of lorries take place, except during the following hours: 06.00 to 19.00 Monday to Friday and 06.00 to 13.00 on Saturday. No such operations shall take place on Sundays or Bank Holidays.

Reason: To protect the amenities of local residents.

25. **Aggregates Depot Sheeting of Lorries**

No aggregates vehicle carrying material shall leave the aggregates depot unless the load is sheeted.

Reason: In the interests of highway safety and the local environment.

26. **Aggregates Depot Control of Dust and Debris**

The use of the rail aggregates depot shall not commence until a scheme to minimise the emissions of dust has been submitted to and approved by the local planning authority. No vehicle leaving the depot site shall emit dust or deposit mud, slurry or other debris on the highway.

Use of the depot shall be in accordance with the approved scheme.

Reason: To protect the amenities of the area and in the interests of highway safety.

27. **Car Park Provision and Management at Water Eaton Parkway**

The layouts of the Water Eaton Parkway Station car parks, to be submitted to the local planning authority for approval under condition 5 (reference (g), (h) and (i)) shall include a signage scheme and be designed, in accordance with drawing E094/67 Rev C (attached to Inquiry Document CRCL/INQ/66), to ensure that (i) there shall be no vehicular access between car parks A or C and the station pick up and drop off area, except for emergency vehicles (ii) vehicular access to and from car parks A, C and the rail aggregates depot shall be via the perimeter road (iii) car park B shall only be used for short stay parking (defined as less than 30 minutes) and for car park season ticket holders (iv) appropriate signage is provided from the highway and within the site to ensure that the restrictions in (i) (ii) and (iii) above are clearly marked.

The car parks shall be constructed and operated in accordance with these requirements and no subsequent alterations shall be made to the car park layouts or signage that contravene these requirements, unless approved, in writing, by the local planning authority, in consultation with Oxfordshire County Council.

Reason: To ensure that the sustainable and integrated operation of the station, the rail car parks and the bus based Oxford Park and Ride facility, on the Water Eaton site is continued, if or when Chiltern Railways is replaced as Station Facility Owner by another Train Operating Company.

28. **Footbridge and Approach Ramps at Mill Lane, Islip**

The footbridge and approach ramps at Mill Lane, Islip, being Work No 16, shall not have artificial lighting, unless approved in writing by the local planning authority. If lighting is approved it shall be low level lighting, designed to avoid light spill or other adverse impacts on the amenity of nearby residential properties.

The detailed proposals for Work No. 16 shall include a scheme of planting, fencing and parapet heights and detailing to avoid overlooking from the bridge and ramps to The Grange, and a scheme for the continuing maintenance of the planting so far as is necessary to ensure that there is an effective barrier to overlooking, from the bridge and ramps, to The Grange.

Development shall be in accordance with the approved scheme.

Reason: To protect rural and residential amenity.

29. **Conservation of Tassel Stonewort**

Construction of the replacement farm accommodation track and farm building on plots 11008, 11009, 12002 and 12003, adjacent to the Beebont Crossing, shall not commence until a scheme to conserve the population of tassel stonewort, present in this location, has been submitted to and approved by the local planning authority, in consultation with the Berkshire, Buckinghamshire and Oxfordshire Wildlife Trust (BBOWT).

The conservation scheme shall be implemented as approved.

Reason: To assist in the conservation of this priority species and to assist in delivering the requirements of the Natural Environment and Rural Communities Act 2006.

30. **Management of Habitat to Assist in the Conservation of Brown Hairstreak Butterfly**

Before development commences for the Individual Section which includes the chord line at Bicester, a scheme for the management and planting of blackthorn scrub within the Limits shall be submitted to and approved by the local planning authority, in consultation with BBOWT and Butterfly Conservation.

The scheme of mitigation shall be implemented as approved.

Reason: To assist in the conservation of this priority species and to assist in delivering the requirements of the Natural Environment and Rural Communities Act 2006.

31. **Measures for the Conservation of Bats at Wolvercote**

Before development commences, a scheme of mitigation of the Scheme's effects on bats in Wolvercot Tunnel shall be approved in writing by the local planning authority in consultation with Natural England.

The scheme of mitigation shall be implemented as approved.

Reason: For the conservation of protected species.

32. **Measures for the Conservation of Great Crested Newts**

Before development commences, a scheme of mitigation of the Scheme's effects on great crested newts shall be approved in writing by the local planning authority in consultation with Natural England.

The scheme of mitigation shall be implemented as approved.

Reason: For the conservation of protected species.

33. **Measures for the Protection of the Lowland Hay Meadow Habitat At The Oxford Meadows Special Area of Conservation**

Before development commences, a scheme of necessary mitigation of the Scheme's effects by virtue of air pollution on lowland meadow habitat in the Oxford Meadows SAC (which is co-terminous with the Wolvercote Meadows SSSI, the Pixey and Yarnton Meads SSSI and the Cassington Meadows SSSI) shall be approved in writing by the local planning authority in consultation with Natural England.

The scheme of mitigation shall be implemented as approved.

Reason: To ensure that the Scheme causes no significant harm to the European site, by virtue of air pollution.

34. **Measures for the Protection of the Hook Meadow and Trap Ground SSSI**

Development shall not commence within the Individual Section or Individual Sections that abut the Hook Meadow and Trap Ground SSSI until a scheme has been approved in writing by the local planning authority for the monitoring and, if found necessary by the monitoring, the mitigation of harm to the SSSI that would be caused by emissions of nitrogen or compounds of nitrogen as a result of the Scheme.

The scheme of monitoring and mitigation shall be implemented as approved.

Reason: For the protection of the SSSI.

35. **Measures for the Protection of the Wendlebury Meads and
Mansmoor Closes SSSI**

Development shall not commence within the Individual Section or Individual Sections that include Manor Farm Crossing until a scheme has been approved in writing by the local planning authority for the mitigation of harm to the SSSI that would be caused by the proposed hardened access track between Beebont Crossing and Home Farm Crossing.

The scheme of mitigation shall be implemented as approved.

Reason: For the protection of the SSSI.

APPENDIX 2 – APPEARANCES

CHILTERN RAILWAY COMPANY LIMITED

Mr Timothy Straker QC Instructed by Eversheds, One Wood Street, London,
EC2V 7WS

Mr Timothy Comyn, of Counsel

They called:

Mr Graham Cross	Business Development Director, Chiltern Railways
Mr Allan Dare	Strategic Development Manager, Chiltern Railways
Mr Neil Gibson	Chairman, East West Rail Consortium
Mr Patrick O'Sullivan	East West Rail Consortium
Mr Leo Eyles	Market Leader, Transport Economics, Steer Davies Gleave
Mr Stephen Barker	Infrastructure Interface Manager, Chiltern Railways
Mr Aidan Nelson	Director, Community Safety Partnership Ltd
Mr Paul Tregear	Director, PFA Consulting
Mr Michael Fraser	Principal Consultant, Environmental Resources Management
Mr Andy Coates	Technical Director, Environmental Resources Management
Mr Richard Caten	Director, Ardent Management Ltd.
Mr Ian Gilder	Head of Planning, Environmental Resources Management

SUPPORTERS

For Railfuture, Thames Valley Branch

Mr Nigel Rose Chairman, Railfuture, Thames Valley Branch

Lord Bradshaw

For Bicester Vision

Mr Bob Langton Chairman, Bicester Vision

For First Great Western

Mr Gareth Jones

For Rail Freight Group

Lord Berkeley Chairman, Rail Freight Group

Dame Fiona Caldicott

For Network Rail

Mr Matthew Rice Sponsor, Chiltern Evergreen 3 Project

For Oxford United Football Club Limited

Mr Mick Brown

General Manager, Oxford United

For Oxford Airport

Mr James Dillon-Godfray

Business Development Director, Oxford Airport

For Aylesbury Vale Advantage

Mr Richard Harrington

Managing Director, Aylesbury Vale Advantage

For Kidlington Parish Council

Councillor Andrew Hornsby-Smith Chairman, Kidlington Parish Council

OBJECTORS

For Trap Ground Allotments Association

Mr Tony Hollander

Chairman, Trap Ground Allotments Association

Mrs Stella Boswell

Dr Joe Lee

Mr Ian Salisbury

Mr Jonathan Clark

Mr Edward Surridge

Councillor Jean Fooks

Oxfordshire County Councillor, Summertown and
Wolvercote

Mr Peter Claye

Dr Michael Drolet

For Engage Oxford

Mr Christopher Dalley

For J Thorowgood & H Chance

Mr Jeremy Thorowgood

For Quadrangle Management Limited

Mr Keith Dancey

Chairman, Quadrangle Management Limited

Nicola Blackwood MP

Dr Steve Young

Ms Sushila Dhall

For Mr & Mrs Schoetz

Mr Harald Schoetz

Dr Robert Hope

Councillor Mike Gotch Oxford City Councillor, Wolvercote

Ms Maureen Rosenberg

Professor Alexander M Korsunsky

Dr Caroline Robertson

Professor Sir Muir Gray

Lady Jackie Gray

Mr Glyn Taylor

For Islip Parish Council

Mr Richard Venables Chairman, Islip Parish Council

For James & Lucy De Jonge

James de Jonge

For Mr & Mrs Conibear

Mr Jon Conibear

Mr John Delafield

For Michael Graham & Amanda Roberts

Mr Michael Graham

For The Ramblers Association

Mr John Orchard

For The Oxford Fieldpaths Society

Mr Peter Ewart

For Charlton On Otmoor Parish Council

Mr Bruce Tremayne Parish Councillor

Mr Ken Haywood

For The Trustees Of Deeley And Calcutt

Mr Graham Candy Partner, Carter Jonas LLP

For Topbreed Limited

Mr Kerry Clarke Simmons and Sons

For Primepark Limited

Mr Kerry Clarke Simmons and Sons

Ms Catherine Quinn

For The Owners & Residents Of Mertons Ground Farm

Mr Dick Van Wijngaarden Van Wijngaarden Technical Solutions & Project

Management

For Mr J Offord & Mrs E Offord and Mr R Bradshaw & Mrs H Bradshaw

Mrs Hazel Bradshaw
Mr John Offord
Mr M Peace

Mr Brian Davies

For Mrs Greta Walker

Mr Edward Grant of Counsel Instructed by Wright Hassell LLP
He called:
Mr Robert Thompson

Mr Alistair Buckley

For Oxford Green Belt Network

Dr Ian Scargill Chairman, Oxford Green Belt Network

For CPRE, Oxfordshire Branch

Mr Alan Jones Chairman, CPRE, Oxfordshire Branch

Ms Hoonie Feltham

For Mr & Mrs West

Mr Paul West

For Mrs Rosemary Harris

Mr Paul Withrington

For Wendlebury Parish Council

Mr Julian Cordy Chairman, Wendlebury Parish Council

For Bus Users UK, Oxford Branch

Mr Hugh Jaeger Group Chairman, Bus Users UK, Oxford Branch

For the Cyclists Touring Club

Mr Philip Ashbourn
Mr Dave Holloway

For Mrs ML Honour, Mr JS Honour and Mr JB Honour

Mr Will Abbott WJA Rural Practice

For The Freemen of Oxford and Port Meadow Protection Group

Mr Stephen Cobb
Mrs Alison Cobb

For The Wolvercote Commoners

Mr Andrew Burchardt Secretary, Wolvercote Commoners

For Grundon Waste Management Limited

Mr Stewart Mitchell Estates Manager, Grundon Waste Management Limited

For Bucks, Berks, Oxon Wildlife Trust

Mrs Rebecca Micklem Conservation Officer, Bucks, Berks, Oxon Wildlife Trust

For Leda Properties Ltd & Mr Andrew Basson

Mr Neil Cameron QC Instructed by Stephen Pegram, Challenor & Son

He called:

Angela Banks

Simon Tucker

Director of Planning and Urban Design, studio/Real
Director, David Tucker Associates

Mr Paul Withrington Director, Transport Watch

Mr Sean Feeney

APPENDIX 3 – INQUIRY DOCUMENTS

Core Documents

CD/1.1	Application	Jan 2010
CD/1.2	Draft Order	Jan 2010
CD/1.2.1	Draft Order Amended for Inquiry Dated 2 November 2010	Nov 2010
CD/1.2.1.1	Draft Order Amended for Inquiry Dated 2 November 2010, modified 20 December 2010	Nov 2010
CD/1.2.2	Draft Order Amended for Inquiry Dated 24 January 2011	Jan 2011
CD/1.3	Explanatory Memorandum	Jan 2010
CD/1.4	Statement of Aims	Jan 2010
CD/1.5	Statement of Consultation	Jan 2010
CD/1.6	List of all Consents, Permissions or Licences	Jan 2010
CD/1.7	Funding Statement	Jan 2010
CD/1.8	Estimate of Costs	Jan 2010
CD/1.9	Order Plans and Sections	Jan 2010
CD/1.10	Book of Reference	Jan 2010
CD/1.11	Public Rights of Way Report	Jan 2010
CD/1.12	Request for Deemed Planning permission, Conditions and Reserved Matters	Jan 2010
CD/1.12.1	Request for Deemed Planning permission, Conditions and Reserved Matters	Oct 2010
CD/1.12.2	Request for Direction under section 90(2A) of the Town and Country Planning Act 1990, conditions to be attached to the Direction and Statement of Reserved Matters	12 Jan 2011
CD/1.12.3	Request for Direction under section 90(2A) of the Town and Country Planning Act 1990, conditions to be attached to the Direction and Statement of Reserved Matters	24 Jan 2011
CD/1.12.4	Request for Direction under section 90(2A) of the Town and Country Planning Act 1990, conditions to be attached to the Direction and Statement of Reserved Matters	27 Jan 2011
CD/1.13	Planning Direction Drawings	Jan 2010
CD/1.14	Planning Statement	Jan 2010
CD/1.15	Environmental Statement Volume 1 (Chapters 1 – 4)	Jan 2010
CD/1.16	Environmental Statement Volume 2 (Chapters 5 – 16)	Jan 2010
CD/1.17	Environmental Statement Volume 3 (Figures and Plans)	Jan 2010
CD/1.18	Environmental Statement Volume 4 (Annexes A – L)	Jan 2010
CD/1.19	Design and Access Statement	Jan 2010
CD/1.19/1	Revised Design and Access Statement	Jan 2011
CD/1.20	Non-Technical Summary	Jan 2010
CD/1.21	Public Rights of Way Plans	Jan 2010
CD/1.21/1	Revised Public Rights of Way Plans	July 2010
CD/1.22	Addendum to the Environmental Statement	Apr 2010
CD/1.22/1	Second Addendum to the Environmental Statement	Sep 2010
CD/1.23	An Introduction to the Application	Jan 2010
CD/1.24	Revised Draft Code of Construction Practice	July 2010
CD/1.25	Application for Open Space Certificate under S19 and S28 of the 1981 Acquisition of Land Act	Jan 2010
CD/1.25a	Notice of intention to issue a Certificate under S19 and S28 of the 1981 Acquisition of Land Act	Sep 2010

CD/1.25/1	Letter dated 24 January 2011 from Eversheds to The National Unit for Land Acquisitions and Disposals, DCLG, stating that CRCL are no longer seeking the powers of compulsory acquisition of permanent rights over the land described in Parts 1 and 2 of the Third Schedule to the Notice	Jan 2011
CD/1.26	Application for Scheduled Monument Consent under the Ancient Monuments and Archaeological Areas Act 1979 for Alchester Roman Site	Feb 2010
CD/1.27	Statement of Case by The Chiltern Railway Company Limited	Aug 2010
CD/1.28	Modification to Draft Order Submission (Langford Lane)	Sept 2010
CD/1.29	Noise and Vibration Mitigation Policy	Oct 2010
CD/1.29/1	Resubmission of the Noise and Vibration Mitigation Policy	25 Jan 2011
CD/1.29/2	Further resubmission of the Noise and Vibration Mitigation Policy	27 Jan 2011

Chiltern Railways Project Development, Engineering and Appraisal Documents

CD/2.1	Chiltern Railways Passenger Licence	Apr 1995
CD/2.2	Extract from Chiltern Railways Franchise Agreement with the Strategic Rail Authority 2002 (pp 387-406)	Feb 2002
CD/2.3	Report 'A New Rail Route to Oxford', Chiltern Railways for DfT	Feb 2003
CD/2.4	Evergreen 3 Project, Bicester to Oxford Line, Survey and Investigation Works, ref. 5081878-ATK-REP-55-005 (Atkins)	Mar 2009
CD/2.5	Evergreen 3: Bicester – Oxford Line Level Crossing Options Assessment Report	Apr 2009
CD/2.6	Memorandum of Understanding with EWRC	June 2009
CD/2.7	Evergreen 3 Newsletter – News and views on Chiltern's proposed new Oxford to London route	Aug 2009
CD/2.8	Letter from South East Partnership Board re EWR funding arrangements	Sept 2009
CD/2.9	Evergreens 3: Parkway Station Site Selection Report	Oct 2009
CD/2.10	Evergreen 3 Newsletter – News and views on Chiltern's proposed new Oxford to London route	Oct 2009
CD/2.11	Langford Lane Crossing: Pre-TWA Options Report, Atkins	Dec 2009
CD/2.12	Evergreen 3 Newsletter – News and views on Chiltern's proposed new Oxford to London route	Jan 2010
CD/2.13	Deed of Amendment to the Franchise Agreement [redacted]	Jan 2010
CD/2.14	Chiltern Railways Track Access Agreement 2004 (revised June 2010)	June 2010
CD/2.15	Evergreen 3 Newsletter – News and views on Chiltern's proposed new Oxford to London route	Apr 2010
CD/2.16	Level Crossing Replacement Options Report – Manor Farm, Home Farm, BBONT, Holts Farm	May 2010
CD/2.17	Bicester Town Station Options Report	May 2010
CD/2.18	Summary of User Surveys at Mill Lane (Islip), Langford Lane, Oddington Foot and BBONT Bridleway Crossings	July 2010
CD/2.19	East West Rail GRIP 4 Outline Business Case Final Report/Non Technical Summary	July 2010
CD/2.20	Assessment of the Impacts of the Langford Lane Alignments on the Setting of the Alchester Scheduled Monument	Aug 2010
CD/2.21	Langford Lane Geophysical Survey	Aug 2010
CD/2.22	Water Resources and Flood Risk Assessment Technical Reports	Aug 2010

CD/2.23	Further Highway Impact Assessment	Aug 2010
CD/2.24	S-Paramics Micro-simulation Traffic Model of London Road, Bicester (Bicester Town Station) – Model Development and Forecasting Report	Aug 2010
CD/2.25	S-Paramics Micro-simulation Traffic Model of A4165 Banbury Road, Oxford (Water Eaton Parkway Station) – Model Development and Forecasting Report	Aug 2010
CD/2.26	Reptile Mitigation Plan	July 2010
CD/2.27	Wolvercot Tunnel Bat Spring Swarming Survey Report	July 2010
CD/2.28	Wolvercot Tunnel Spring Swarming Survey- Anabat Results	June 2010
CD/2.29	Winter Birds Survey	Sept 2010
CD/2.30	Demand and Revenue Forecasting for Evergreen 3 Bicester- Oxford Scheme	Aug 2010
CD/2.31	Review of the hydrological impacts of proposals for hardened tracks on and around the Wendlebury Meads and Mansmoor Closes SSSI	Nov 2010

National and European Planning and Transport Policy Documents

CD/3.1	HMRI Railway Safety Principles and Guidance, Part 2E, Guidance on Level Crossings	1996
CD/3.2	PPG16 Archaeology and Planning	Nov 1990
CD/3.3	PPG15 Planning and the Historic Environment	Sept 1994
CD/3.4	PPG24 Planning and Noise	Sept 1994
CD/3.5	PPG2 Green Belt	Jan 1995
CD/3.6	PPG13 Transport	Apr 2001
CD/3.7	European Transport Policy for 2010	Sept 2001
CD/3.8	PPG17 Planning for Open space, Sport and Recreation	July 2002
CD/3.9	White Paper The Future of Transport – A Network for 2030	July 2004
CD/3.10	White Paper The Future of Rail	July 2004
CD/3.11	PPS7 Sustainable Development in Rural Areas	Aug 2004
CD/3.12	PPS23 Planning and Pollution Control	Nov 2004
CD/3.13	PPS1: Delivering Sustainable Development	Jan 2005
CD/3.14	Securing the Future, Delivering UK Sustainable Development Strategy	Mar 2005
CD/3.15	PPS9 Biodiversity and Geological Conservation	Aug 2005
CD/3.16	Planning and Climate Change Supplement to PPS1	Dec 2006
CD/3.17	The Eddington Transport Study	Dec 2006
CD/3.18	Office of Rail Regulation Policy on Level Crossings	Feb 2007
CD/3.19	Department for Transport, Delivering a Sustainable Railway	July 2007
CD/3.20	CLG Location Decision Statement on Eco-Towns	July 2009
CD/3.21	Low Carbon Transport: A Greener Future	July 2009
CD/3.22	Planning Policy Statement Eco-towns A Supplement to PPS1	July 2009
CD/3.23	Rail Safety and Standards Board, Road-Rail Interface Safety	Oct 2009
CD/3.24	PPS4 Planning for Sustainable Economic Growth	Dec 2009
CD/3.25	Office of Rail Regulation Presents Proposals to Improve Safety at Level Crossings	Dec 2009
CD/3.26	Rail Safety and Standards Board, Overview of Safety Performance for 2009/2010	Jan 2010
CD/3.27	GKGN0692 issue 1, Guidance on Level Crossing Interface Requirements, RSSB	Feb 2010
CD/3.28	GKRT0192 issue 1, Level Crossing Interface Requirements, RSSB	Feb 2010
CD/3.29	PPS5 Planning for the Historic Environment	Mar 2010
CD/3.30	PPS25 Development and Flood Risk	Mar 2010

CD/3.31	Great Western Route Utilisation Study [Extracts 1-14]	Mar 2010
CD/3.32	Rail Safety and Standards Board, Road Rail Interface Special Topic Report 2010	Apr 2010
CD/3.33	Office of Rail Regulation Consultation Document, Managing Level Crossings: Guide for Managers, Designers and Operators,	Apr 2010
CD/3.34	Office of Rail Regulation Consultation Document, Using Level Crossings Safely	Apr 2010
CD/3.35	Rail Safety and Standards Board, Annual Safety Performance Report 2009/2010	July 2010
CD/3.36	Network Rail, All Level Crossing Risk Model (ALCRM) User Guide	Mar 2008
Regional and Local Planning and Transport Policy Documents		
CD/4.1	Regional Transport Strategy Chapter 9 of Regional Planning Guidance for the South East [RP9]	July 2004
CD/4.2	Milton Keynes & South Midlands Sub-Regional Strategy	Mar 2005
CD/4.3	The adopted Oxford Local Plan 2001-2016	Nov 2005
CD/4.4	Cherwell Core Strategy Issues and Options Paper	Feb 2006
CD/4.5	Oxfordshire Rights of Way Improvement Plan	Feb 2006
CD/4.6	Oxfordshire Local Transport Plan [LTP2] 2006-2011	Apr 2006
CD/4.7	Regional Economic Strategy 2006 – 2016	Oct 2006
CD/4.8	Cherwell Core Strategy, Bicester and Central Oxfordshire Site Allocations Issues and Options Paper	May 2007
CD/4.9	Oxford Core Strategy 2026 Proposed Submission	Sept 2008
CD/4.10	Core Strategy Minor Post Publication Changes to the Oxford Core Strategy DPD	Nov 2008
CD/4.11	South East Plan	May 2009
CD/4.12	Cherwell Local Development Framework Draft Core Strategy	Feb 2010
CD/4.13	Cherwell District Council Cabinet Report - Chiltern Railways Project Evergreen 3	Sept 2009
CD/4.14	Cherwell District Council Committee Report - Bicester to Oxford Rail Link	Mar 2010
CD/4.15	Cherwell District Council - Statement - Making “NW Bicester” a reality	July 2009
CD/4.16	Oxford Local Development Framework Core Strategy Further Changes to the Submission Core Strategy and Supporting Information	April 2010
Legislation, Circulars and British Standards		
CD/5.1	Oxford and Bletchley Junction Railway Act 1846 [c.lxxxii]	June 1846
CD/5.2	Buckinghamshire Railway [Buckingham and Brackley Junction] Railway Act 1846[c.ccxxxiii]	July 1846
CD/5.3	Buckinghamshire Railway Act 1847 [c.ccxxxvi]	July 1847
CD/5.4	Buckinghamshire Railway Act 1850 [c.vi]	May 1850
CD/5.5	Highways Act 1980	1980
CD/5.6	Acquisition of Land Act 1981	1981
CD/5.7	Transport and Works Act 1992	1992
CD/5.8	Protection of Badgers Act 1992	1992
CD/5.9	European Directive on the Conservation of Natural Habitats and Wild Flora and Fauna (92/43/EEC)	1992
CD/5.10	Railways Act 1993 [Sections 4-8 and 23]	Nov 1993
CD/5.11	Conservation (Natural Habitats, & c.) Regulations, 1994, as amended 2007	1994
CD/5.12	Calculation of Railway Noise. The Department of Transport 1995	1995
CD/5.13	Noise Insulation (Railways and other Guided Transport Systems) Regulations 1996 (SI 1996 No. 428).	1996

CD/5.14	BS4142:1997, Method for Rating Industrial Noise Affecting Mixed Residential and Industrial Areas	1997
CD/5.15	Wildlife and Countryside Act 1981 (as amended by the CROW Act 2000)	2000
CD/5.16	Countryside and Rights of Way Act 2000	2000
CD/5.17	The Guidelines for Landscape and Visual Impact Assessment, Landscape Institute and the Institute of Environmental Management and Assessment	2002
CD/5.18	Transport and Works (Inquiries Procedure) Rules 2004	2004
CD/5.19	Circular 06/2004: Compulsory Purchase and the Criche Down Rules	Oct 2004
CD/5.20	Circular 06/2005: Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System	Aug 2005
CD/5.21	Institute of Ecology and Environmental Management. Guidelines for Ecological Impact Assessment in the United Kingdom.	2006
CD/5.22	Transport and Works (Applications and Objections Procedure) (England and Wales) Rules 2006	2006
CD/5.23	Transport and Works (Model Clauses for Railways and Tramways) Order 2006	2006
CD/5.24	Circular 01/2006 Guidance on Changes to the Development Control System	June 2006
CD/5.25	Climate Change Act 2008	2008
CD/5.26	BS6472-1-2008 Guide to the evaluation of human exposure to vibration in buildings. part 1: Vibration Sources Other Than Blasting	2008
CD/5.27	BS5228: 2009 Noise and Vibration Control on Construction Sites - Part 1 Noise	2009
CD/5.28	BS5228: 2009 Noise Control on Construction and Open Sites – Part 2 Vibration	2009
CD/5.29	Circular 1/09 Rights of Way	Oct 2009
CD/5.30	The Conservation of Habitats and Species Regulations 2010	2010
CD/5.31	Circular 11/2005 The Town and Country Planning (Green Belt) Direction 2005	Dec 2005

GENERAL INQUIRY DOCUMENTS

X/1	Transport and Works Act Orders, A Brief Guide, Department of Transport, August 2006
X/2	C3/94 – Awards of Costs in Application Proceedings Under Section 6 of the Transport and Works Act 1992, August 1994
X/3	A Guide to Transport and Works Act Procedures 1996
X/4	Statement of Matters
X/5	Notes of the Pre-Inquiry Meeting held on 7 September
X/6.1	Note and annex from the Inspector regarding the points raised by Mr Horton (OBJ98/2)
X/6.2	Note from the Inspector regarding the points raised by Mr Salisbury (OBJ5/4)
X/6.3	Note from the Inspector regarding the points raised by Mr Clark (OBJ236/2)
X/6.4	Note from the Inspector regarding the points raised by Dr Robertson (OBJ234/3)
X/6.5	Note from the Inspector regarding the points raised by Sir Muir and Lady Gray (OBJ149/2) (and Dr Robertson (OBJ234/3))
X/7	Circular 11/95 The Use of Conditions In Planning Permissions
X/8.7	Material undertaken to be provided, as at 16.00 on 5 January 2011
X/9	Papers regarding the status of Regional Spatial Strategies
X/10	Preliminary Notes for the Round Table Session on Conditions

X/11	Inspector's Further Questions of Clarification of Chiltern Rail
X/12.1	Inspector's Working Paper: Accompanied Site Visit
X/12.2	Accompanied Site Visit itinerary
X/13	Inspector's Further Questions of Clarification of Chiltern Rail dated 13 January 2011
X/14	Planning Policy Guidance 13 – Transport, January 2011
X/15	Conditions session: Discussion note on a candidate planning condition regarding noise and vibration
X/16	The application in Mr Feeney's closing submissions

CHILTERN RAILWAYS DOCUMENTS

CRCL/P/1/A	Proof of evidence of Graham Cross
CRCL/P/1/C	Summary proof of evidence of Graham Cross
CRCL/P/1/D	Errata to proof of evidence of Graham Cross
CRCL/P/1/E	Note to the Inspector on DfT BCR Approval Thresholds
CRCL/P/1/F	Regulation of access to the rail network and consultation
CRCL/P/2/A	Proof of evidence of Allan Dare
CRCL/P/2/B	Appendices to proof of evidence of Allan Dare
CRCL/P/2/C	Summary proof of evidence of Allan Dare
CRCL/P/2/D	Errata to proof of evidence of Allan Dare
CRCL/P/2/D/1	Further errata to proof of evidence of Allan Dare
CRCL/P/3/A	Proof of evidence of Neil Gibson
CRCL/P/4/A	Proof of evidence of Patrick O'Sullivan
CRCL/P/4/B	Appendices to proof of evidence of Patrick O'Sullivan
CRCL/P/4/C	Summary proof of evidence of Patrick O'Sullivan
CRCL/P/5/A	Proof of evidence of Leo Eyles
CRCL/P/5/B	Appendices to proof of evidence of Leo Eyles
CRCL/P/5/C	Summary proof of evidence of Leo Eyles
CRCL/P/5/D	Errata to proof of evidence of Leo Eyles
CRCL/P/5/E	Capital Cost Price Base – Leo Eyles
CRCL/P/6/A	Proof of evidence of Stephen Barker
CRCL/P/6/B1	Appendix 1 to proof of evidence of Stephen Barker
CRCL/P/6/B2	Appendix 2 to proof of evidence of Stephen Barker
CRCL/P/6/C	Summary proof of evidence of Stephen Barker
CRCL/P/6/D	Errata to proof of evidence of Stephen Barker
CRCL/P/6/E	Responses to questions of clarification raised by Mr Salisbury in respect of the evidence of Stephen Barker
CRCL/P/6/F	Further response to question of clarification raised by Mr Salisbury in respect of the evidence of Stephen Barker
CRCL/P/6/G	Note on proposed junctions and proposed line speed
CRCL/P/6/H	Note on Railway Boundary Adjacent to Diversion of FP 318/6 (Oddington)
CRCL/P/6/I	Note on scrub at Oxford Station
CRCL/P/6/J	Note on position of fence on land parcel 29002
CRCL/P/7/A	Proof of evidence of Aidan Nelson
CRCL/P/7/B	Appendices to proof of evidence of Aidan Nelson
CRCL/P/7/C	Summary proof of evidence of Aidan Nelson
CRCL/P/7/D	Errata to proof of evidence of Aidan Nelson
CRCL/P/7/E	Note by Aidan Nelson in response to questions of clarification raised on Day 2 and matters raised by the Inspector on Day 3
CRCL/P/7/F	Rebuttal by Aidan Nelson in response to the rebuttal of Mr Salisbury - OBJ5/9
CRCL/P/7/G	Note on safety management information system data
CRCL/P/8/A	Proof of evidence of Paul Tregear
CRCL/P/8/B	Appendices to proof of evidence of Paul Tregear

CRCL/P/8/C	Summary proof of evidence of Paul Tregear
CRCL/P/8/D	Errata to proof of evidence of Paul Tregear
CRCL/P/8/E	Response to Inspector's Question on Bicester Station Car Parking
CRCL/P/8/F	Response to Inspector's question on the Highway Agency's response to the further highway traffic assessment
CRCL/P/8/G	Response to Inspector's question on validation of Oxfordshire County Council's COTM Model
CRCL/P/9/A	Proof of evidence of Michael Fraser
CRCL/P/9/B	Appendices to proof of evidence of Michael Fraser
CRCL/P/9/C	Summary proof of evidence of Michael Fraser
CRCL/P/9/D	Errata to proof of evidence of Michael Fraser
CRCL/P/9/E	Note on clarifications to issues raised in Proof of Evidence of Michael Fraser
CRCL/P/10/A	Proof of evidence of Andy Coates
CRCL/P/10/B	Appendices to proof of evidence of Andy Coates
CRCL/P/10/C	Summary proof of evidence of Andy Coates
CRCL/P/10/D	Errata to proof of evidence of Andy Coates
CRCL/P/10/E	Chiltern Railways' update in relation to Natural England (OBJ246/3)
CRCL/P/10/F	Information from air pollution information system (APIS) website
CRCL/P/11/A	Proof of evidence of Richard Caten
CRCL/P/11/B	Appendices to proof of evidence of Richard Caten
CRCL/P/11/C	Summary proof of evidence of Richard Caten
CRCL/P/11/D	Errata proof of evidence of Richard Caten
CRCL/P/11/D/1	Further errata to proof of evidence of Richard Caten
CRCL/P/12/A	Proof of evidence of Ian Gilder
CRCL/P/12/B	Appendices to proof of evidence of Ian Gilder
CRCL/P/12/C	Summary proof of evidence of Ian Gilder
CRCL/P/12/D	Errata to proof of evidence of Ian Gilder
CRCL/P/12/E	Aristotle Lane Mitigation Works – Progress of Negotiations with Oxford City Council
CRCL/P/12/F	Gavray Drive Meadows Local Wildlife Site – Impact of Order Scheme
CRCL/P/12/G	Amended Request for Direction and Revised Draft Planning Conditions
CRCL/P/12/H	East-West Rail (Western Section) Planning and Transport Policy

RESPONSES TO QUESTIONS OF CLARIFICATION

CRCL/CR/OBJ/5/A	Chiltern Railway's response to points of clarification of Mr Salisbury
CRCL/CR/OBJ/5/B	Chiltern Railway's response to points of clarification of Mr Salisbury dated 22 October 2010
CRCL/CR/OBJ/98/A	Chiltern Railway's response to points of clarification of Mr Horton
CRCL/CR/OBJ/149/A	Chiltern Railway's response to points of clarification of Sir and Lady Gray
CRCL/CR/OBJ/234/A	Chiltern Railway's response to points of clarification of Caroline Robertson
CRCL/CR/OBJ/236/A	Chiltern Railway's response to points of clarification of Mr Clark

GENERAL INQUIRY DOCUMENTS – CHILTERN RAILWAYS

CRCL/INQ/1	Status of Objectors, Representors and Supporters dated 29 October 2010
CRCL/INQ/1/1	Status of Objectors, Representors and Supporters dated 27 January 2011
CRCL/INQ/2	List of appearances on behalf of the promoter

CRCL/INQ/3	CRCL's response in CRCL's proofs of evidence to the Secretary of State's Statement of Matters
CRCL/INQ/3/1	Update of CRCL's response in CRCL's to the Secretary of State's Statement of Matters
CRCL/INQ/4	Compliance Pack
CRCL/INQ/5	Paper of amendments to the Draft Order as shown on CRCL/INQ/6
CRCL/INQ/5/1	The references to page numbers and articles in this paper of amendments are references to those pages and articles of the Order as applied for in January 2010
CRCL/INQ/6	Draft Order amended for the Inquiry (amendments shown tracked) dated 2 November 2010
CRCL/INQ/6/1	Draft Order amended for the Inquiry (amendments shown tracked) dated 24 January 2011
CRCL/INQ/7	Opening on behalf of Chiltern Railways
CRCL/INQ/8	Note to the Inspector on Progress with the Scheduled Monument Consent
CRCL/INQ/8.1	Note to the Inspector on Further Update on the Scheduled Monument Consent
CRCL/INQ/9	Weston Otmoor Ecotown: a consideration of how the proposed development may affect neighbouring Sites of Scientific Interest (SSSIs)
CRCL/INQ/10	Report 706 - Apium repens creeping marshwort Species Recovery Programme 1995-2005, English Nature
CRCL/INQ/11	Statement on behalf of Claudia Uhlman regarding amendments to the Inspector's proofs of evidence
CRCL/INQ/12	Statement on behalf of Stephen Barker regarding amendments to the Inspector's proofs of evidence
CRCL/INQ/13	Note on Common Land and mitigation works at Aristotle Lane
CRCL/INQ/14	The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995
CRCL/INQ/15	HSE - A guide to the reporting of Injuries, Diseases, and Dangerous Occurrences Regulations 1995
CRCL/INQ/16	Modifications proposed by Eversheds; removal from the Order of the access ramp to Trap Ground Allotments from the existing bridge
CRCL/INQ/16/1	Modifications proposed by Eversheds; removal from the Order of land, or rights in land, within Port Meadow
CRCL/INQ/17	Port Meadow: arrangements for vehicle access to allotments
CRCL/INQ/18	The extent of Grade 3A agricultural land to be taken
CRCL/INQ/18/1	Further update on the extent of Grade 3A agricultural land to be taken
CRCL/INQ/19	The requirements of Apium repens – an ecohydrological assessment, Final report, February 2005
CRCL/INQ/19a	Email dated 17 November 2010 from James O'Connor, Eversheds to the Programme Officer regarding references to the affinity of creeping marshwort for nitrogen in The requirements of Apium repens – an ecohydrological assessment, Final report, February 2005
CRCL/INQ/20	Before The Honourable Mr Justice Sales between Cala Homes (South) Ltd v SSCLG – [2010] EWHC 2866 (Admin) – Judgement of application for judicial review of a decision by the Secretary of State for Communities and Local Government to revoke Regional Strategies
CRCL/INQ/21	Inspector's Question 3.1, Sheet 39, Deposited Plans and Sections and Open Space Plan (CD1.9)
CRCL/INQ/22	Note to the Inspector on evidence of the robustness of the business case model
CRCL/INQ/23	TAG Unit 3.15.4 – Rail Passenger Demand Forecasting Methodology
CRCL/INQ/24	Further report on hydrology at Wendlebury Meads and Mansmoor Closes SSSI
CRCL/INQ/25	Note to the Inspector on the evidence of Oxfordshire County Council's

	support for maintaining a foot and equestrian crossing at Mill Lane, Islip
CRCL/INQ/26	Options for footpath diversions at Gosford and Water Eaton No. 4
CRCL/INQ/27	Note to the Inspector on Cotswold scheme potential passenger markets and Aristotle Lane level crossing
CRCL/INQ/28	Note on train service timetable planning
CRCL/INQ/29	Note to the Inspector on Trap Ground Allotments Association Car Parking
CRCL/INQ/30	The case for the grant of compulsory purchase powers in the Order scheme
CRCL/INQ/31	Implementation of the noise and vibration mitigation planning condition and policy
CRCL/INQ/32	Note on refined noise modelling and monitoring
CRCL/INQ/33	Origins and destinations of traffic using Langford Lane level crossing
CRCL/INQ/34	Length of journeys following closure of the Langford Lane Level Crossing
CRCL/INQ/34/1	Further note on length of journeys following closure of the Langford Lane Level Crossing
CRCL/INQ/35	Minerals industry and aggregate depots in Oxfordshire
CRCL/INQ/36	Statement of Common Ground between Kidlington Parish Council and Chiltern Railways
CRCL/INQ/37	BS EN ISO 9921:2003 – Ergonomics – Assessment of speech communication
CRCL/INQ/38	Chiltern Railway's response to the application for costs made by Mrs Greta Walker (OBJ7/6/1)
CRCL/INQ/39	Photographs of "Green" land
CRCL/INQ/40	Note on saved policies contained in the Cherwell Local Plan, and the adopted Cherwell Local Plan
CRCL/INQ/41	Statement of Common Ground between Chiltern Railways and Bus Users UK, Oxford Group
CRCL/INQ/42	Note regarding Chesterfield Properties PLC V Secretary of State for the Environment and Harris V First Secretary of State and Others
CRCL/INQ/43	Relevant Planning & Transport Policies
CRCL/INQ/44	Composite Holts Plan
CRCL/INQ/44/1	Revised composite Holts Plan
CRCL/INQ/45	Note on the offer of vibration monitoring in response to the request from Engage
CRCL/INQ/46	Note to the Inspector on the length of survey at Mill Lane, Islip in June 2010
CRCL/INQ/47	Location of photograph 17 in Annex E of the public rights of way report (CD/1.11)
CRCL/INQ/48	Chiltern Railway's response to Natural England's outstanding objections set out in OBJ246/5
CRCL/INQ/49	The powers of compulsory and permanent acquisition in the Order
CRCL/INQ/50	Update note on rights sought over Port Meadow
CRCL/INQ/51	Note regarding Commons Registration
CRCL/INQ/52	Exercise of Compulsory Purchase Powers on Land at Mansmoor Lane
CRCL/INQ/53	Example locations of existing riding stables close to high speed railways
CRCL/INQ/54	Revised Water Eaton Parkway Station – Illustrative General Layout (Phase 1 & Phase 2)
CRCL/INQ/55	Exchange of E-Mails between Dick Helling, Oxfordshire County Council and Ian Salisbury (OBJ5)
CRCL/INQ/56	Air quality management areas featuring in the Environmental Statement
CRCL/INQ/57	Note on identification of train movements during noise measurements as raised by Dr C Robertson
CRCL/INQ/58	Note regarding the design and maintenance of noise barriers
CRCL/INQ/59	Note in response to air quality question raised by Dr S Young (OBJ95)
CRCL/INQ/60	The Conservation of Habitats and Species Regulations 2010, as applied to

	the Order Application
CRCL/INQ/61	Chiltern Railways' position statement on Natural England's objection in relation to bats at Wolvercot Tunnel
CRCL/INQ/62	Chiltern Railways' Note on the ownership of Port Meadow
CRCL/INQ/63	Secretary of State for Transport Decision Letter (extract) dated 26 March 2003 in respect of the West Coast Mainline
CRCL/INQ/64	Response to X/11 regarding land parcels required solely for Phase 2B of the scheme
CRCL/INQ/65	Drainage through proposed raised section of the bridle path at Aristotle Lane footbridge
CRCL/INQ/66	Implementation Agreement between Chiltern Railways and Oxfordshire County Council
CRCL/INQ/67	Amended request for Planning Direction and further revisions to Proposed Planning Conditions
CRCL/INQ/67/1	Amended request for Planning Direction and further revisions to Proposed Planning Conditions
CRCL/INQ/67/2	Chiltern Railways further responses to conditions proposed by other parties
CRCL/INQ/67/3	Network Rail Biodiversity Action Plan v2
CRCL/INQ/67/4	Chiltern Railways consolidated request for Direction and planning conditions
CRCL/INQ/68	Note on Revised Design and Access Statement – CD/1.19/1
CRCL/INQ/69	Resubmission of the noise and vibration mitigation policy (CD/1.29/1 dated 25 January 2011)
CRCL/INQ/69/1	Submission of the amended noise and vibration mitigation policy (CD/1.29/2 dated 27 January 2011)
CRCL/INQ/70	Access routes prior to and post scheme – Holts Farm, Manor Farm, BBOWT and Home Farm
CRCL/INQ/71	Response to Inspector's Questions to Mr Eyles following cross examination by Mr Withrington
CRCL/INQ/72	Summary of information provided for Habitats Regulations Assessment in relation to Oxford Meadows SAC
CRCL/INQ/73	Chiltern Railway's position statement on Natural England's objection in relation to bats in their natural range
CRCL/INQ/74	Chiltern Railway's position statement on Natural England's objection in relation to the effects of air emissions on Sites of Special Scientific Interest (SSSI)
CRCL/INQ/75	Submission in response to Natural England's statement OBJ246/6
CRCL/INQ/76	East West Rail: Application to Regional Growth Fund
CRCL/INQ/77	List of withdrawal index
CRCL/INQ/77/1	Updated list of withdrawal index dated 28 January 2011
CRCL/INQ/78	Response to X/15 regarding a candidate planning condition for noise and vibration
CRCL/INQ/79	Response to X/13 – Inspector's further questions of clarification of Chiltern Railways
CRCL/INQ/80	R (on the application of Morge) v Hampshire County Council
CRCL/INQ/81	Lighting report on the Wolvercot Tunnel
CRCL/INQ/82	Directions saving policies in the Oxford and Cherwell Local Plans
CRCL/INQ/83	Assessment of traffic likely to be generated at the Aggregates Depot
CRCL/INQ/84	Outline of statutory framework governing railway standards on Chiltern Railways lines
CRCL/INQ/85	Closing submissions of Chiltern Railways

CHILTERN RAILWAYS REBUTTAL PROOFS

CRCL/R/REP7	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection
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	and evidence of Councillor Jean Fooks
CRCL/R/REP9	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Charlton on Otmoor Parish Council
CRCL/R/REP11/1	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Deborah Dance on behalf of the Oxford Preservation Trust
CRCL/R/REP11/2	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Robert Kinchin-Smith on behalf of the Oxford Preservation Trust
CRCL/R/REP12	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Cyclists Touring Club
CRCL/R/REP13	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Cherwell District Council
CRCL/R/OBJ1	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Mr Hayward
CRCL/R/OBJ1/1	Revision to Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Mr Hayward
CRCL/R/OBJ5	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Ian Salisbury
CRCL/R/OBJ5/1	Chiltern Railways Response to further questions by Ian Salisbury
CRCL/R/OBJ5/2	Chiltern Railways Response to further questions by Ian Salisbury
CRCL/R/OBJ7/1	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Robert Thompson on behalf of Greta Walker
CRCL/R/OBJ7/2	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Greta Walker
CRCL/R/OBJ7/3	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Richard Walker on behalf of Greta Walker
CRCL/R/OBJ9	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Dr Michael Drolet and Dr Rosalind Thomas
CRCL/R/OBJ9/1	Chiltern Railways Further Rebuttal Proof of Evidence in a letter dated 5 November 2010 in relation to the objection and evidence of Dr Michael Drolet and Dr Rosalind Thomas
CRCL/R/OBJ12	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Paul and Denise West
CRCL/R/OBJ12/1	Chiltern Railways Further Rebuttal Proof of Evidence in relation to the objection and evidence of Paul and Denise West
CRCL/R/OBJ13	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of The Trap Ground Allotment Association
CRCL/R/OBJ14	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Quadrangle Management Limited
CRCL/R/OBJ14/1	Chiltern Railways Further Rebuttal Proof of Evidence in a letter dated 10 November 2010 in relation to the objection and evidence of Quadrangle Management Limited
CRCL/R/OBJ26	Chiltern Railways Further Rebuttal Proof of Evidence in relation to the objection and evidence of Beth Forrow
CRCL/R/OBJ33	Chiltern Railways Further Rebuttal Proof of Evidence in relation to the objection and evidence of Gosford and Water Eaton Parish Council
CRCL/R/OBJ34	Chiltern Railways Further Rebuttal Proof of Evidence in relation to the objection and evidence of Ian East
CRCL/R/OBJ39	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Michael Graham and Amanda Roberts
CRCL/R/OBJ41	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of The Ramblers Association

CRCL/R/OBJ44-46	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Jesse Benjamin , Margaret Lily and Jesse Scott Honour
CRCL/R/OBJ44-46/1	Chiltern Railways Further Rebuttal Proof of Evidence in relation to the objection and evidence of Jesse Benjamin , Margaret Lily and Jesse Scott Honour
CRCL/R/OBJ50	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of James and Lucy de Jonge
CRCL/R/OBJ51-52/1	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Simon Tucker on behalf of Andrew Basson and Leda Properties
CRCL/R/OBJ51-52/2	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Angela Banks of Studio Real on behalf of Andrew Basson and Leda Properties
CRCL/R/OBJ51-52/3	Extracts from deposited plans sheets 4/4a and 5 showing the location of plots 04a003, 05017 and 04037
CRCL/R/OBJ51-52/4	Cherwell DC Planning Committee, Thursday 6 January 2011 – Public Document Pack
CRCL/R/OBJ53	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Birch Sites Limited
CRCL/R/OBJ55	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Oxford Fieldpaths Society
CRCL/R/OBJ61	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Councillor Gotch and Professor Gotch
CRCL/R/OBJ63	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of South Central Ambulance Service NHS Trust
CRCL/R/OBJ64	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of West Oxfordshire District Council
CRCL/R/OBJ66/1	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of John Jones on behalf of McKay Securities Ltd
CRCL/R/OBJ66/2	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Alec Philpott on behalf of McKay Securities Ltd
CRCL/R/OBJ66/3	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Gregory Beale on behalf of McKay Securities Ltd
CRCL/R/OBJ66/4	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Neil Warner on behalf of McKay Securities Ltd
CRCL/R/OBJ75	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Mr and Mrs Delafield
CRCL/R/OBJ77	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Mr Thorowgood and H Chance
CRCL/R/OBJ85	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of North Oxford Golf Club
CRCL/R/OBJ88	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Mr Napier
CRCL/R/OBJ90	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Merry Adams
CRCL/R/OBJ91	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Mr and Mrs Conibear
CRCL/R/OBJ91/1	Letter dated 13 December 2010 from Ian Gilder on behalf of Chiltern Railways to Mr and Mrs Conibear in response to OBJ91/4
CRCL/R/OBJ95	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Dr Young
CRCL/R/OBJ97	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Marianne Julebin (superseded by CLCR/R/OBJ97/1)
CRCL/R/OBJ97/1	Chiltern Railways Replacement Rebuttal Proof of Evidence in relation to

	the objection and evidence of Marianne Julebin
CRCL/R/OBJ98	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Henry Horton
CRCL/R/OBJ100	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of David Davies
CRCL/R/OBJ101	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Hanson Quarry Products Europe Limited
CRCL/R/OBJ102	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Grundon Waste Management Limited
CRCL/R/OBJ107	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Mark and David Richardson
CRCL/R/OBJ109	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Oxford City Council
CRCL/R/OBJ111	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Brian and Phoebe Davies
CRCL/R/OBJ117	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Mr and Mrs Howard
CRCL/R/OBJ118	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Mr and Mrs Farr
CRCL/R/OBJ122	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Oxford Green Belt Network
CRCL/R/OBJ123	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Sean Feeney
CRCL/R/OBJ132	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Alice and Glyn Taylor
CRCL/R/OBJ143	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Maureen Rosenberg
CRCL/R/OBJ149A	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Sir Muir Gray
CRCL/R/OBJ149B	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Lady Jackie Gray
CRCL/R/OBJ179	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Robert Hope
CRCL/R/OBJ179/A	Chiltern Railways Further Rebuttal Proof of Evidence in relation to the objection and evidence of Robert Hope
CRCL/R/OBJ184	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Mark Howard
CRCL/R/OBJ185	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Graham and Nicky Honour
CRCL/R/OBJ185/1	Chiltern Railways Further Rebuttal Proof of Evidence in relation to the objection and evidence of Graham and Nicky Honour
CRCL/R/OBJ189	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Topbreed Limited
CRCL/R/OBJ189/1	Chiltern Railways Further Rebuttal Proof of Evidence in relation to the objection and evidence of Topbreed Limited
CRCL/R/OBJ190	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Primepark Limited
CRCL/R/OBJ191	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of The owners and residents of Merton Grounds Farm
CRCL/R/OBJ192, 249,257	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of The Norman Trust (OBJ192), London & Metropolitan International Developments Ltd (OBJ257) and Gallagher Estates (OBJ249)
CRCL/R/OBJ194	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of The Trustees of A Deeley and I H G Calcutt

CRCL/R/OBJ195	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of the Campaign to Protect Rural England
CRCL/R/OBJ195/1	Leaflet on the proposed new Oxford to London Route appended to Rebuttal Proof of Evidence in relation to the objection and evidence of the Campaign to Protect Rural England
CRCL/R/OBJ205	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Bus Users UK, Oxford Branch
CRCL/R/OBJ211	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Buckinghamshire, Berkshire and Oxfordshire Wildlife Trust
CRCL/R/OBJ211/1	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Buckinghamshire, Berkshire and Oxfordshire Wildlife Trust, Plan PC/2
CRCL/R/OBJ211/2	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Buckinghamshire, Berkshire and Oxfordshire Wildlife Trust, Chiltern Railways Draft Planning Conditions for Priority Species
CRCL/R/OBJ211/3	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Buckinghamshire, Berkshire and Oxfordshire Wildlife Trust, Notification of SSSI – Wendlebury Meads and Mansmoor Closes
CRCL/R/OBJ212	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Lewis and Sarah Butler
CRCL/R/OBJ213	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Rosemary Harris
CRCL/R/OBJ214	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of British Waterways Board
CRCL/R/OBJ222	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Stephen Unwin
CRCL/R/OBJ225	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Francis Shouler, Jennifer Shouler and James Shouler
CRCL/R/OBJ230	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of The Trustees of Catherine and Bartholomew Quinn
CRCL/R/OBJ232	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Harry and Reneth Schoetz
CRCL/R/OBJ232/1	Chiltern Railways Further Rebuttal Proof of Evidence in a letter dated 9 November 2010 in relation to the objection and evidence of Harry and Reneth Schoetz
CRCL/R/OBJ234	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Caroline Robertson
CRCL/R/OBJ234/A	Chiltern Railways Further Rebuttal Proof of Evidence in relation to the objection and evidence of Caroline Robertson
CRCL/R/OBJ234/B	Chiltern Railways Further Rebuttal Proof of Evidence in relation to the objection and evidence of Caroline Robertson
CRCL/R/OBJ234/C	Chiltern Railways Further Rebuttal Proof of Evidence in relation to the objection and evidence of Caroline Robertson
CRCL/R/OBJ234/D	Chiltern Railways Further Rebuttal Proof of Evidence in relation to the objection and evidence of Caroline Robertson
CRCL/R/OBJ235	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Ms Sushila Dhall
CRCL/R/OBJ235/1	Chiltern Railways Further Rebuttal Proof of Evidence in a letter dated 9 November 2010 in relation to the objection and evidence of Ms Sushila Dhall
CRCL/R/OBJ236	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Jonathan Clark
CRCL/R/OBJ238	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Mr and Mrs Offord and Mr and Mrs Bradshaw

CRCL/R/OBJ241	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Paul Miller
CRCL/R/OBJ242	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Tim Howard
CRCL/R/OBJ245	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Alistair Buckley
CRCL/R/OBJ255	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Peter Claye
CRCL/R/OBJ255/1	Chiltern Railways Further Rebuttal Proof of Evidence in a letter dated 5 November 2010 in relation to the objection and evidence of Peter Claye
CRCL/R/OBJ286	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Wendlebury Parish Council
CRCL/R/OBJ293	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of DB Schenker Rail (UK) Limited
CRCL/R/OBJ294	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Islip Parish Council
CRCL/R/OBJ295	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Professor Korsunsky
CRCL/R/OBJ295/1	Chiltern Railways Further Rebuttal Proof of Evidence in relation to the objection and evidence of Professor Korsunsky
CRCL/R/OBJ297	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Engage, Oxford
CRCL/R/OBJ312	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Nicola Blackwood MP
CRCL/R/OBJ313	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of SS Philip and James' Primary School
CRCL/R/OBJ314	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Alison Cobb and Stephen Cobb
CRCL/R/OBJ315	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Edward Surridge
CRCL/R/OBJ316	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Jordan Hill Residents' Association
CRCL/R/OBJ317	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Hoonie Feltham
CRCL/R/OBJ318	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of The Campaign to Protect Rural England, Oxford City District
CRCL/R/OBJ319	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Paul Withrington
CRCL/R/OBJ320	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Peter and Carol Jarvis
CRCL/R/OBJ321	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of Wolvercote Commoners Committee
CRCL/R/OBJ322	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence of The Friends of the Trap Grounds
CRCL/OBJ1003	Chiltern Railways Rebuttal Proof of Evidence in relation to the objection and evidence relating to the application for an Open Space Certificate of Ian Salisbury

SUPPORTER DOCUMENTS

SUPP9/1	Statement of Case of Mr N Rose
SUPP12/1	Statement of Case of Mr Andrew McCallum
SUPP14/1	Statement of Case of Railfuture Thames Valley Branch
SUPP14/2	Proof of evidence of Nigel Rose on behalf of Railfuture Thames Valley Branch
SUPP14/3-	Appendices to proof of evidence of Nigel Rose on behalf of Railfuture Thames

14	Valley Branch
SUPP14/15	Closing submissions of Nigel Rose on behalf of Railfuture Thames Valley Branch
SUPP16/1	Proof of evidence of Lord Bradshaw
SUPP18/2	Proof of evidence of Kidlington Parish Council (see also OBJ311/1)
SUPP18/3	Response of Mr A Hornsby-Smith – OBJ/311 Kidlington Parish Council – Rail station traffic distribution sensitivity test
SUPP20/1	Proof of evidence of First Great Western (original representation)
SUPP25/1	Proof of evidence of Bicester Vision (original representation)
SUPP26/1	Proof of evidence of James Dillon-Godfray, Oxford Airport
SUPP32/1	Proof of evidence of Oxford United (original representation)
SUPP38/1	Proof of evidence of the Rail Freight Group
SUPP39/1	Proof of evidence of Aylesbury Vale Advantage (original representation)
SUPP41/1	Proof of evidence of Network Rail
SUPP41/2	Appendix to proof of evidence of Network Rail
	Letters of support from supporters 1 to 45.

OBJECTOR DOCUMENTS

OBJ1/1	Original representation of Ken Haywood
OBJ1/2	Proof of evidence of Ken Haywood
OBJ1/3	Rebuttal proof of evidence of Ken Haywood
OBJ5/1	Statement of Case of Mr Ian Salisbury
OBJ5/2	Proof of evidence of Mr Ian Salisbury
OBJ5/3	Summary proof of evidence of Mr Ian Salisbury
OBJ5/4	Questions of clarification from Mr Ian Salisbury to Chiltern Rail
OBJ5/4a	Re-request for further information concerning the evidence submitted by Chiltern Railways dated 15 October 2010
OBJ5/5	Supplementary proof of evidence of Mr Ian Salisbury
OBJ5/6a	Rebuttal proof of Mr Ian Salisbury to Stephen Barker
OBJ5/6b	Rebuttal proof of Mr Ian Salisbury to Richard Caten
OBJ5/6c	Rebuttal proof of Mr Ian Salisbury to Ian Gilder
OBJ5/6d	Rebuttal proof of Mr Ian Salisbury to Aidan Nelson
OBJ5/7	Submission regarding the rights and privileges of the Freeman of Oxford over Port Meadow and the status of the Meadow as Common Land and its designation as a Special Area of Conservation dated 2 November 2010
OBJ5/8	Request for clarification of Chiltern's Railways' rebuttal proof of evidence
OBJ5/9	Rebuttal of the further evidence of Aidan Nelson – CRCL/P/7/E
OBJ5/10	Fact sheet on Issues for treatment of acute time-critical conditions in rural areas
OBJ5/11	Emergency access distances to allotment gardens
OBJ5/12	Request for clarification of Chiltern's Railways' note to the Inspector on trap Ground Allotments Association Car Parking (CRCL/INQ/29)
OBJ5/13	Design Criteria for Footbridges – Extract from Design Manual for Roads and Bridges
OBJ5/14	Managing Geotechnical Risk – Extract from Design Manual for Roads and Bridges
OBJ5/15	Metric Handbook, Planning and Design Data – Extract Table IV Design for the vehicle
OBJ5/16	Drawing 3, Ian Salisbury, 15 December 2010
OBJ5/17	Railway Safety Principles and Guidance, Part 2 Section E Guidance on Level Crossings
OBJ5/18	Supplementary rebuttal evidence of Chiltern's response (dated 8/12/2010) to further questions CRCL/R/OBJ5/1

OBJ5/19	Email correspondence between Bill Dennis (13 September 2010) and Ian Salisbury (11 August 2010)
OBJ5/20	Note for the Inspector from Ian Salisbury dated 12 January 2011
OBJ5/21	Email from Ian Salisbury dated 16 January 2011 with suggested conditions
OBJ5/22	Email from Ian Salisbury dated 17 January 2011 with suggested conditions for the car park
OBJ5/23	Rebuttal by Ian Salisbury of the new evidence of Ian Gilder and Andrew Coates in relation to Oxford Meadows SAC – CRCL/INQ/72
OBJ5/24	Suggested Condition 4
OBJ5/25	Joint closing submissions on behalf of Trap Ground Allotment Association (OBJ13), Mr Jonathan Clark (OBJ236) and Mr Salisbury
OBJ5/25a	Opinions of the Lords of Appeal for judgement
OBJ7/1	Statement of Case by Wright Hassall LLP on behalf of Mrs Greta Walker
OBJ7/2	Proof of evidence by Robert Thompson on behalf of Mrs Greta Walker
OBJ7/3	Summary proof of evidence by Robert Thompson on behalf of Mrs Greta Walker
OBJ7/3/1	Supplementary proof of evidence by Robert Thompson on behalf of Mrs Greta Walker
OBJ7/3/2	Email dated 18 May 2010 from Bob Thompson to Paul Clarke
OBJ7/4	Proof of evidence by Richard Walker on behalf of Mrs Greta Walker
OBJ7/5	Proof of evidence by Mrs Greta Walker
OBJ7/6	Application for costs
OBJ7/6a	Copies of emails accompanying cost application
OBJ7/6/1	Application for costs made under Department of Transport Circular 3/94
OBJ7/6/1a	Amplification of the written argument submitted in respect of the application for costs made under Department of Transport Circular 3/94
OBJ7/7	Closing submissions made on behalf of Mrs Greta Walker
OBJ9/1	Proof of evidence of Dr and Mrs Drolet (original representation)
OBJ10/1	Statement of Case of Tom Tappin Ltd
OBJ12/1	Proof of evidence of Mr and Mrs West (original representation)
OBJ12/2	Annotated plan
OBJ12/3	Extract from Bicester Local Plan, December 1988
OBJ12/4	Plan showing development land north of Gavray Drive – also a possible site for a new rail station
OBJ12/5	Extract from South East Bicester Development Brief
OBJ13/1	Statement of Case of Trap Ground Allotment Association
OBJ13/2	Proof of evidence of Trap Ground Allotment Association
OBJ13/3	Witness statement of Tony Hollander, Trap Ground Allotment Association
OBJ13/4	Email exchange between Mr Hollander and Oxford City Council regarding the lease of the Allotments
OBJ13/5	E-mail from Mr Tony Hollander to the Programme Officer dated 16/12/2010
OBJ13/6	Email statement from John Griffin, Consultant to Oxfordshire County Council, 9 January 2011
OBJ13/7	Aristotle Lane Indicative Layout
OBJ13/8	Ian Salisbury Drawing 3
OBJ14/1	Statement of Case of Quadrangle Management Limited to be used as evidence
OBJ14/2	Suggested Conditions by Quadrangle Management Limited
OBJ15/1	Statement of Case by Savills on behalf of Merton College
OBJ16/1	Statement of Case by Savills on behalf of Exeter College
OBJ17/1	Statement of Case by Berry Morris on behalf of Robert Barbour
OBJ26/1W	Written representation of Beth Forrow

OBJ33/1	Proof of evidence of Carl Smith on behalf of Gosford and Water Eaton Parish Council
OBJ33/2	Original objections of Gosford and Water Eaton Parish Council
OBJ33/3	Written rebuttal of the evidence of Ian Gilder by Gosford and Water Eaton Parish Council
OBJ33/4	Written rebuttal of the evidence of Paul Tregear by Gosford and Water Eaton Parish Council
OBJ33/5	Written rebuttal of the evidence of Andy Coates by Gosford and Water Eaton Parish Council
OBJ33/6	Written rebuttal of the evidence of Michael Fraser by Gosford and Water Eaton Parish Council
OBJ33/7	Written rebuttal of the evidence of Stephen Barker by Gosford and Water Eaton Parish Council
OBJ33/8	Letter dated 20 November 2010 accompanying the written responses by Gosford and Water Eaton Parish Council, regarding the name of the proposed new railway station at Water Eaton
OBJ33/9	Letter dated 21 December 2010 from Gosford and Water Eaton Parish Council to the Programme Officer
OBJ33/10	Letter dated 5 January 2011 from Gosford and Water Eaton Parish Council to the Programme Officer
OBJ33/11	Letter dated 24 January 2011 from Gosford and Water Eaton Parish Council to the Programme Officer
OBJ33/12	Letter dated 27 January 2011 from Gosford and Water Eaton Parish Council to the Programme Officer setting out their concluding remarks
OBJ34/1W	Written representation of Dr Ian East
OBJ39/1	Statement of Case of Mr M Graham and Ms A Roberts
OBJ39/2	Proof of evidence of Mr M Graham and Ms A Roberts
OBJ41/1	Statement of Case of the Ramblers Association
OBJ41/2	Proof of evidence of the Ramblers Association
OBJ41/3-8	Appendices to proof of evidence of the Ramblers Association
OBJ41/9	Joint Closing submissions of the Ramblers Association and Oxford Fieldpaths Society and (OBJ55/4)
OBJ44/1	Statement of Case by WJA Rural Practice on behalf of Margaret Lily Honour
OBJ45/1	Statement of Case by WJA Rural Practice on behalf of Jesse Scott Honour
OBJ46/1	Statement of Case by WJA Rural Practice on behalf of Jesse Benjamin Honour
OBJ44-46/1	Proof of evidence by W J Abbott on behalf of Margaret Lily, Jesse Scott and Jesse Benjamin Honour
OBJ50/1	Proof of evidence of James and Lucy De Jonge
OBJ51&52/1	Proof of evidence of Angela Banks on behalf of Andrew Basson and Leda Properties Ltd
OBJ51&52/2	Proof of evidence of Simon Tucker on behalf of Andrew Basson and Leda Properties
OBJ51&52/3	Addendum to Proof of Evidence of Simon Tucker on behalf of Andrew Basson and Leda Properties
OBJ51&52/4	Letter, dated 5 January 2011, from Oxfordshire County Council to David Tucker Assocs regarding Talisman Road & Cycle Track Bicesterwith plan attached
OBJ51&52/5	Opening submissions on behalf of the Objectors by Neil Cameron QC
OBJ51&52/6	List of appearances on behalf of the Objectors
OBJ51&52/7	Closing Submissions on behalf of the Objectors by Neil Cameron QC
OBJ53/1	Statement of Case by Dundas and Wilson LLP on behalf of Birch Sites Limited

OBJ53/2W	Written representation by Dundas and Wilson LLP on behalf of Birch Sites Limited
OBJ55/1	Statement of Case of Oxford Fieldpaths Society
OBJ55/2	Proof of evidence of Oxford Fieldpaths Society
OBJ55/3	Oxfordshire County Council's Local Transport Plan 3, newsletter, July 2010
OBJ55/4	Joint Closing submissions of Oxford Fieldpaths Society and the Ramblers Association (OBJ41/9)
OBJ61/1	Statement of Case of Councillor Mike Gotch to be given as evidence
OBJ61/2	Comments on conditions by Mike Gotch
OBJ63/1	Statement of Case by Crane and Staples on behalf of the South Central Ambulance Service
OBJ63/2	Proof of evidence of John Nichols on behalf of the South Central Ambulance Service
OBJ64/1	Statement of Case by West Oxfordshire District Council
OBJ66/1	Statement of Case by Shoosmiths on behalf of McKay Securities plc
OBJ66/2.1	Proof of evidence of John Jones on behalf of McKay Securities plc
OBJ66/2.2	Appendix to proof of evidence of John Jones on behalf of McKay Securities plc
OBJ66/3.1	Proof of evidence of Alec Philpott on behalf of McKay Securities plc
OBJ66/3.2	Figures and appendices to proof of evidence of Alec Philpott on behalf of McKay Securities plc
OBJ66/3.3	Summary proof of evidence of Alec Philpott on behalf of McKay Securities plc
OBJ66/4.1	Proof of evidence of Gregory Beale on behalf of McKay Securities plc
OBJ66/4.2	Appendices to proof of evidence of Gregory Beale on behalf of McKay Securities plc
OBJ66/4.3	Summary proof of evidence of Gregory Beale on behalf of McKay Securities plc
OBJ66/5.1	Proof of evidence of Neil Warner on behalf of McKay Securities plc
OBJ66/5.2	Appendices to proof of evidence of Neil Warner on behalf of McKay Securities plc
OBJ66/5.3	Summary proof of evidence of Neil Warner on behalf of McKay Securities plc
OBJ75/1	Statement of Case of Mr and Mrs Delafield to be given as evidence
OBJ77/1	Statement of Case of Mr J Thorowgood and Ms H Chance
OBJ77/2	Proof of evidence of Mr J Thorowgood and Ms H Chance
OBJ85/1	Statement of Case of North Oxford Golf Club
OBJ85/2	Proof of evidence of Robert Harris on behalf of North Oxford Golf Club
OBJ88/1	Statement of Case of Mr P Napier
OBJ88/2	Proof of evidence of Mr P Napier
OBJ88/3	Letter dated 9 November 2010 from Mr P Napier to the Inspector setting out the latest position
OBJ88/4	Final positional statement
OBJ90/1	Proof of evidence of Merry Adams (original representation)
OBJ91/1	Statement of Case of Mr and Mrs Conibear
OBJ91/2	Proof of evidence of Mr and Mrs Conibear
OBJ91/3	Photographs taken from the property of Mr and Mrs Conibear
OBJ91/4	Suggested conditions for the Eastern Bridge, Islip, Mill Lane Crossing by Mr and Mrs Conibear
OBJ95/1	Statement of Case of Dr and Mrs Stephen Young
OBJ95/2	Proof of evidence of Dr and Mrs Stephen Young
OBJ95/3	Reducing railway noise levels – the impact of forthcoming European legislation
OBJ95/4	Brunswick Park Centre, Noise/Acoustics Report

OBJ95/5	Extracts from Review of the effect of track stiffness on track performance
OBJ95/6	Railway noise and the insulation of dwellings
OBJ95/7	Suggested conditions by Dr and Mrs Stephen Young
OBJ97/1	Proof of evidence of Marianne Julebin (original representation)
OBJ98/1	Statement of Case by Cluttons LLP on behalf of Henry Horton
OBJ98/2	Questions of clarification from Henry Horton to Chiltern dated 10 September 2010
OBJ98/3	Proof of evidence of Henry Horton
OBJ98/4	Appendices to proof of evidence of Henry Horton
OBJ100/1W	Written representation of David Davies
OBJ101/1	Statement of Case by Knights Solicitors LLP on behalf of Hanson Quarry Products Europe Ltd
OBJ101/2	Proof of evidence by Paul Williams on behalf of Hanson Quarry Products Europe Ltd
OBJ101/3	Summary proof of evidence by Paul Williams on behalf of Hanson Quarry Products Europe Ltd
OBJ101/4	Supplementary statement of Paul Williams on behalf of Hanson Quarry Products Europe Ltd
OBJ101/5	Suggested conditions by Paul Williams on behalf of Hanson Quarry Products Europe Ltd
OBJ102/1	Statement of Case by Bircham Dyson Bell on behalf of Grundon Waste Management Ltd.
OBJ102/2	Proof of evidence of Stewart Mitchell on behalf of Grundon Waste Management Ltd.
OBJ102/3	Appendices to proof of evidence of Stewart Mitchell on behalf of Grundon Waste Management Ltd.
OBJ102/4	Summary proof of evidence of Stewart Mitchell on behalf of Grundon Waste Management Ltd.
OBJ102/5	Map showing locations of Prospect Farm, Worton farm, Finmere Quarry and Gosford Grain Silo
OBJ102/6	Extracts from the Oxfordshire County Council Annual Monitoring Reports
OBJ102/7	Notice of the decisions on four planning applications by Premier Aggregates relating to the Finmere Quarry and Landfill Site
OBJ102/8	Satellite photograph of the current Gosford Grain Silo and Water Eaton Park and Ride site
OBJ102/9	List of documents which may be referred to
OBJ102/10	Closing submissions
OBJ103/1	Statement of Case by GVA Grimley on behalf of Wolseley UK. Ltd T/A Plumb Centre to be given as evidence
OBJ104/1	Statement of Case by GVA Grimley on behalf of Hartwool Ltd T/A Grayline Coaches, Alan and Brian Gray to be given as evidence
OBJ106/1	Original representation of Edwin and Leanne McClements
OBJ107/1	Statement of Case by GV A Grimley on behalf of Mark Richardson, David Richardson and Bicester Bodyshop to be given as evidence
OBJ108/1	Statement of Case by Keir Ventures Limited on behalf of Worcester College
OBJ108/2	Proof of evidence by Keir Ventures Limited on behalf of Worcester College
OBJ109/1	Statement of Case of Oxford City Council
OBJ109/2W	Written representation of Oxford City Council
OBJ109/3W	Written representation by David Radford, Archaeologist, Oxford City Council
OBJ109/4W	Letter dated 15 November 2010 from Oxford City Council responding to

	CRCL/P/12/E – Aristotle Lane Mitigation Works
OBJ109/5W	Statement from Oxford City Council in respect of Trap Grounds Allotment, Revised Parking Proposals by Ian Salisbury (OBJ5/18)
OBJ109/6W	Letter dated 13 January 2011 from Oxford City Council in respect of Supporting Statement to evidence of Ian Salisbury (OBJ5/18)
OBJ111/1	Proof of evidence of Brian Davies (original representation)
OBJ111/2	Closing submission of Brian Davies
OBJ117/1	Statement of Case by Bircham Dyson Bell on behalf of Mr and Mrs Howard
OBJ118/1	Statement of Case by Bircham Dyson Bell on behalf of Mr and Mrs Farr
OBJ117-118/1	Proof of evidence on behalf of Mr and Mrs Farr and Mr and Mrs Howard
OBJ122/1	Statement of Case of Oxford Green Belt Network
OBJ122/2	Proof of evidence of Dr Scargill on behalf of Oxford Green Belt Network
OBJ122/3	Extract from appeal decision on park and ride schemes, 1999
OBJ122/4	Extract from the Oxfordshire Structure Plan 2016
OBJ122/5	Suggested conditions by Dr Scargill on behalf of Oxford Green Belt Network
OBJ123/1	Statement of Case of Mr S Feeney
OBJ123/2	Report to Oxford City Council by David Fenton & Stephen J Pratt dated 21 December 2010
OBJ123/3	Undated Core Document for Oxford Core Strategy – Joint statement from Oxford City Council, Natural England and Berkshire, Buckinghamshire and Oxfordshire Wildlife Trust.
OBJ123/4	Submission by the Berkshire, Buckinghamshire and Oxfordshire Wildlife Trust to the Oxford Core Strategy, Matter 8 Strategic Locations, 22 June 2009
OBJ123/5	Natura 2000 Standard Data Form – Oxford Meadows
OBJ123/6	JNCC Extract – Oxford Meadows
OBJ123/7	NBN Gateway – Species records at 10km or better that fall within or overlap Oxford Meadows (SAC)
OBJ123/8	Guidance document on Article 6(4) of the Habitats Directive 92/43/EEC
OBJ123/9	Nature Conservation Law, Third edition, Colin T Reid
OBJ123/10	The implementation of EU legislation aiming at the conservation of Biodiversity 2009/2108 (INI), European Parliament, 23 February 2010
OBJ123/11	Information on the White Horse Alliance
OBJ123/12	Summary of the judgement CASE C-127/02
OBJ123/13	Implementing EC Conservation Law
OBJ123/14	Case commentary – Court rules on Isle of Wight habitat protection
OBJ123/15	Special Protection Status Issues, Rupert Warren, November 2007
OBJ123/16	Web article – Fishermen question integrity of environment watchdog's data
OBJ123/17	Web article – Plans to sell off nature reserves, rivers and forests
OBJ123/18	Guidance document on Article 6(4) of the Habitats Directive 92/43/EEC
OBJ123/19	Managing Natura 2000 sites The provisions of Article 6 of the Habitats Directive 92/43/EEC
OBJ123/20	Assessment of plans and projects significantly affecting Natura 2000 sites
OBJ123/21	Nature and biodiversity cases – Ruling of the European Court of Justice
OBJ123/22	The EU Habitats Directive – Making the Article 6 Assessments, the case of Ballyseedy Wood
OBJ123/23	Extracts from Defra, part IV of the Environment Act 1995, Local Air Quality Management, Technical Guidance LAQM.TG(09), February 2009
OBJ123/24	Port Meadow with Wolvercote Common and Green SSI statement
OBJ123/25	Closing submissions of Sean Feeney
OBJ128/1	Letter dated 4 November 2010 from English Heritage to the TWA

	Orders Unit setting out their current position
OBJ130/1	Statement of Case by Lyons Davidson on behalf of Plumbase Limited
OBJ131/1	Statement of Case of Oxfordshire County Council
OBJ131/2	Proof of evidence of David Taylor on behalf of Oxfordshire County Council
OBJ131/3	Proof of evidence of Richard Olam on behalf of Oxfordshire County Council
OBJ131/4	Email to the Programme Officer from Robert Hanson, Solicitor to Oxfordshire County Council dated 12 January 2011
OBJ131/5	Letter dated 11 January 2011 on behalf of Oxfordshire County Council expressing support for Evergreen3
OBJ131/6	Letter dated 13 January 2011 on behalf of Oxfordshire County Council in respect of the Council's land ownership
OBJ131/7	Written representation regarding suggested Water Eaton conditions
OBJ131/8	Email dated 16 January 2011 from John Griffin on behalf of Oxfordshire County Council to Ian Salisbury regarding suggested conditions at St Philip and St James School
OBJ132/1	Statement of Case of Mr and Mrs Taylor to be given as evidence
OBJ132/2	Letter of 26 February 2010 from Mr Taylor to the TWA Unit
OBJ132/3	Closing submission of Mr Taylor
OBJ143/1	Statement of Case of Ms M Rosenberg
OBJ143/2	Proof of evidence of Ms M Rosenberg
OBJ143/3	Further proof of evidence of Ms M Rosenberg
OBJ149/1a	Proof of evidence of Sir Muir Gray
OBJ149/1b	Proof of evidence Jackie Gray
OBJ149/1b/1	Further proof of evidence Jackie Gray
OBJ149/2	Questions of clarification from Muir & Jackie Gray and Caroline Robertson (OBJ/234)
OBJ149/3	Suggested conditions supported by Muir & Jackie Gray(OBJ/149), Caroline Robertson (OBJ/234), Professor Korsunsky (OBJ/295), Maureen Rosenberg (OBJ/143), Peter Claye (OBJ/255) and Mr & Mrs Taylor (OBJ/132)
OBJ149/4a	Closing submissions of Sir Muir Gray
OBJ149/4b	Closing submissions of Lady Jackie Gray
OBJ179/1	Original representation of Robert Hope
OBJ179/2	Proof of evidence of Robert Hope
OBJ179/3	Summary of Modelling VFM in Franchise Specification
OBJ182/1	Statement of Case by King Sturge LLP on behalf of Warburtons
OBJ183/1	Statement of Case of the Church Commissioners for England
OBJ184/1	Statement of Case of Mr Mark Howard
OBJ184/2	Proof of evidence of Mr Mark Howard
OBJ184/3-6	Appendices to proof of evidence of Mr Mark Howard
OBJ184/7	Letter dated 9 December 2010, together with a written representation by Mr Mark Howard
OBJ185/1	Statement of Case of Mr G and Mrs N Honour
OBJ185/2	Proof of evidence of WJ Abbott on behalf of Mr G and Mrs N Honour
OBJ185/3	Letter dated 19 November 2010 to the Programme Officer from WJ Abbott on behalf of Mr G and Mrs N Honour
OBJ185/4	Written representation by WJ Abbott on behalf of Mr G and Mrs N Honour
OBJ185/5	Final submissions by WJ Abbott on behalf of Mr G and Mrs N Honour
OBJ187/1	Statement of Case by GVA Grimley on behalf of Allan Plant and Bicester Auto Repairs to be given as evidence
OBJ189/1	Statement of Case by Simmons and Sons on behalf of Topbreed Limited
OBJ189/2	Proof of evidence of Kerry Clarke on behalf of Topbreed Limited

OBJ189/3	Summary proof of evidence of Kerry Clarke on behalf of Topbreed Limited
OBJ189/4	Rebuttal proof of evidence of Kerry Clarke on behalf of Topbreed Limited
OBJ189/5	Land provision – The Orange route
OBJ189/6	Note setting out the basis on which Topbreed and a number of neighbouring objectors would withdraw their objections
OBJ189/7	Topbreed response to CRCL/INQ/34 and CRCL/INQ/34/1
OBJ189/7a	Topbreed response to CRCL/INQ/34 and CRCL/INQ/34/1 and re-dated version of OBJ189/7
OBJ189/8	Suggested conditions on behalf of Topbreed
OBJ189/9	Closing submissions of Kerry Clarke on behalf of Topbreed Limited and Primepark Limited (OBJ/190)
OBJ190/1	Statement of Case by Simmons and Sons on behalf of Primepark Limited
OBJ190/2	Proof of evidence of Kerry Clarke on behalf of Primepark Limited
OBJ190/3	Summary proof of evidence of Kerry Clarke on behalf of Primepark Limited
OBJ190/4	Rebuttal proof of evidence of Kerry Clarke on behalf of Primepark Limited
OBJ191/1	Statement of Case of owners and residents of Merton Grounds Farm
OBJ191/2	Proof of evidence by Dick van Wijngaarden on behalf of the owners and residents of Merton Grounds Farm
OBJ191/3	Appendices to proof of evidence by Dick van Wijngaarden on behalf of the owners and residents of Merton Grounds Farm
OBJ191/4	Summary proof of evidence by Dick van Wijngaarden on behalf of the owners and residents of Merton Grounds Farm
OBJ191/5	Rebuttal proof of evidence of Richard Caten by Dick van Wijngaarden on behalf of the owners and residents of Merton Grounds Farm
OBJ191/6	Rebuttal proof of evidence of Ian Gilder by Dick van Wijngaarden on behalf of the owners and residents of Merton Grounds Farm
OBJ191/7	Rebuttal proof of evidence of Aidan Nelson by Dick van Wijngaarden on behalf of the owners and residents of Merton Grounds Farm
OBJ191/8	Route Maps
OBJ191/9	Errata to Route Maps
OBJ191/10	Purpose and point in evidence for site visit
OBJ191/11	Traffic survey at Langford Lane
OBJ191/12	Closing submissions by Dick van Wijngaarden on behalf of the owners and residents of Merton Grounds Farm
OBJ194/1	Statement of Case by Carter Jonas on behalf of the Trustees of Deeley and Calcutt
OBJ194/2	Proof of evidence of Graham Candy on behalf of the Trustees of Deeley and Calcutt
OBJ194/3	Plan showing land ownership of the Trustees of Deeley and Calcutt
OBJ195/1	Statement of Case of CPRE Oxfordshire Branch
OBJ195/2	Proof of evidence by Alan Jones on behalf of CPRE Oxfordshire Branch
OBJ195/3	Summary proof of evidence by Alan Jones on behalf of CPRE Oxfordshire Branch
OBJ195/4	Proposed conditions by Alan Jones on behalf of CPRE Oxfordshire Branch
OBJ205/1	Statement of Case of Bus Users UK Oxford Branch
OBJ205/1A	Proof of evidence of Hugh Jeager on behalf of Bus Users UK Oxford Branch
OBJ205/2	Map of bus links with rail passenger catchment areas
OBJ205/3	Map of stoppages and diversions of public rights of way

OBJ205/4	Summary proof of evidence of Hugh Jaeger on behalf of Bus Users UK Oxford Branch
OBJ205/5	Closing submissions of Hugh Jaeger on behalf of Bus Users UK Oxford Branch
OBJ208/1	Statement of Case of Mrs A Williams
OBJ211/1	Statement of Case of Berks, Bucks and Oxon Wildlife Trust
OBJ211/2	Proof of evidence of Rebecca Micklem of Berks, Bucks and Oxon Wildlife Trust
OBJ211/3	Summary proof of evidence of Rebecca Micklem of Berks, Bucks and Oxon Wildlife Trust
OBJ211/4	Supplementary proof of evidence of Rebecca Micklem of Berks, Bucks and Oxon Wildlife Trust
OBJ211/5/APP/1a	Appendix – letter dated 10 April 1989 re access to Wendlebury Meads
OBJ211/5/APP/1b	Appendix – letter dated 28 July 1988 from Oxfordshire County Council re access track at Charlton-on-Otmoor
OBJ211/5/APP/1c	Appendix – letter dated 28 July 1988 from Oxfordshire County Council re access track at Charlton-on-Otmoor, page 2
OBJ211/5/APP/1d	Appendix – plan Lot 5, Mill Farm, Charlton-on-Otmoor
OBJ211/5/APP/1e	Appendix – Tender document for sale of 9.37 acres of Agricultural Land at Mansmoor Road
OBJ211/5/APP/1f	Appendix – Tender document for sale of 9.37 acres of Agricultural Land at Mansmoor Road, part 2
OBJ211/6/APP/2	Appendix – Official Land Registry copy of Title
OBJ211/6/APP/2a	Appendix – Official Land Registry copy of Title ON 124421
OBJ211/7	Supplementary proof of evidence of Rebecca Micklem of Berks, Bucks and Oxon Wildlife Trust
OBJ211/8	Suggested conditions by Rebecca Micklem of Berks, Bucks and Oxon Wildlife Trust
OBJ211/9	Closing submissions by Rebecca Micklem of Berks, Bucks and Oxon Wildlife Trust
OBJ212/1	Statement of Case by Bircham Dyson Bell on behalf of Lewis and Sarah Butler
OBJ212/2	Proof of evidence by Lewis Butler on behalf of Lewis and Sarah Butler
OBJ213/1	Statement of Case by Blandy and Blandy on behalf of Rosemary Harris
OBJ213/2	Proof of evidence of Rosemary Harris
OBJ213/3	Appendix to proof of evidence of Rosemary Harris
OBJ213/4	Further questions of clarification on behalf of Rosemary Harris
OBJ213/5	Email exchange between Mr Withrington and Mr Eyles
OBJ213/6	Rebuttal proof of evidence by Paul Withrington on behalf of Rosemary Harris
OBJ213/7	Suggested conditions by Rosemary Harris
OBJ213/7a	D9 –Noise and vibration mitigation scheme - Crossrail
OBJ213/8	Closing submissions of Rosemary Harris
OBJ213/9	Response by Rosemary Harris to CRCL/INQ/80
OBJ214/1	Statement of Case by Bircham Dyson Bell on behalf of British Waterways Board
OBJ214/2	Proof of evidence by Jeff Whyatt on behalf of British Waterways Board
OBJ214/3	Summary proof of evidence by Jeff Whyatt on behalf of British Waterways Board
OBJ214/4	Appendices to proof of evidence by Jeff Whyatt on behalf of British Waterways Board
OBJ221/1	Statement of Case by Bircham Dyson Bell on behalf of Royal Mail Group Limited and Post Office Limited
OBJ222/1	Statement of Case by Bircham Dyson Bell on behalf of Mr and Mrs Unwin

OBJ222/2	Proof of evidence by Stephen Unwin on behalf of Mr and Mrs Unwin
OBJ222/3	Appendix to proof of evidence by Stephen Unwin on behalf of Mr and Mrs Unwin
OBJ222/4	Summary proof of evidence by Stephen Unwin on behalf of Mr and Mrs Unwin
OBJ225/1	Statement of Case by Carter Jonas on behalf of Francis Shouler, Jennifer Shouler and James Shouler
OBJ225/2	Proof of evidence of Graham Candy on behalf of Francis Shouler, Jennifer Shouler and James Shouler
OBJ226/1	Statement of Case by Robinson & Hall LLP on behalf of Mr B Henman, J E Henman and Son
OBJ230/1	Statement of Case of Catherine and Bartholomew Quinn to be given as evidence
OBJ230/2	Table of trip distances and times
OBJ232/1	Statement of Case of Mr and Mrs Schoetz to be given as evidence
OBJ234/1	Statement of Case of Dr C Robertson
OBJ234/2	Proof of evidence of Dr C Robertson
OBJ234/3	Questions of clarification from Dr C Robertson to Chiltern Rail
OBJ234/4	Rebuttal proof of evidence of Dr C Robertson
OBJ234/5	Extract from National Rail Trends Yearbook 2009-10 – Table 6.2c Subsidy per passenger kilometre by TOC
OBJ234/6	Summary Proof of evidence of Dr C Robertson as read out at the Inquiry
OBJ234/7	Comment on CRCL/INQ/56 – Air quality management areas featuring in the Environmental Statement
OBJ234/8	Comment on CRCL/INQ/45 and vibration monitoring in the Environmental Statement
OBJ234/9	Comment on CRCL/INQ/57 and other issues relating to ERM's unattended noise monitoring at Lakeside
OBJ234/10	Noise levels, modelling, monitoring, mitigation, Government policy and CRCL/INQ/32
OBJ234/11	Closing submissions of Dr C Robertson
OBJ235/1	Statement of Case of Ms Sushila Dhall
OBJ235/2	Proof of evidence of Ms Sushila Dhall (letter of 8 August to ERM)
OBJ236/1	Statement of Case of Mr J Clark to be given as evidence
OBJ236/2	Questions raised by Mr J Clark to Chiltern Rail
OBJ236/3	Email from Mr J Clark to the Programme Officer dated 10 November 2010 regarding parking at the gates of the allotments
OBJ236/4	Rebuttal of CRCL/INQ/29 by Mr J Clark
OBJ236/5	Email from Mr J Clark to the Programme Officer dated 4 January 2011 regarding Conditions.
OBJ238/1	Statement of Case by CRJ Anstey on behalf of Mr and Mrs Offord and Mr and Mrs Bradshaw
OBJ238/2	Proof of evidence of John Offord on behalf of Mr and Mrs Offord and Mr and Mrs Bradshaw
OBJ238/3	Summary proof of evidence of John Offord on behalf of Mr and Mrs Offord and Mr and Mrs Bradshaw
OBJ238/4	Appendices to proof of evidence of John Offord on behalf of Mr and Mrs Offord and Mr and Mrs Bradshaw
OBJ238/5	Rebuttal proof of evidence of John Offord on behalf of Mr and Mrs Offord and Mr and Mrs Bradshaw
OBJ238/5a	Further appendix(aerial view of the Wickes building and car park) to rebuttal proof of evidence of John Offord on behalf of Mr and Mrs Offord and Mr and Mrs Bradshaw
OBJ238/6	Email dated 26 November from Mr Offord to the Programme Officer

	regarding the Orange Route
OBJ238/7	Rebuttal of CRCL/INQ/53
OBJ238/8	Closing submissions of John Offord on behalf of Mr and Mrs Offord and Mr and Mrs Bradshaw
OBJ239/1	Statement of Case by CRJ Anstey on behalf of Mr and Mrs Smith
OBJ240/1	Statement of Case by CRJ Anstey on behalf of the Trustees of Water Eaton Estate
OBJ241/1	Statement of Case by CRJ Anstey on behalf of Mr Paul Miller
OBJ241/2	Proof of evidence by CRJ Anstey on behalf of Mr Paul Miller
OBJ241/3	Summary proof of evidence by CRJ Anstey on behalf of Mr Paul Miller
OBJ241/4	Appendices to proof of evidence by CRJ Anstey on behalf of Mr Paul Miller
OBJ241/5	Expert witness report by CRJ Anstey on behalf of Mr Paul Miller
OBJ242/2	Statement of Case by CRJ Anstey on behalf of Mr T P Howard
OBJ242/2A	Proof of evidence of Mr T P Howard
OBJ242/2B	Appendices to proof of evidence of Mr T P Howard
OBJ242/3	Written representation of Mr T P Howard
OBJ245/1	Original letter of objection of Mr A Buckley
OBJ245/1a	Statement of Case of Mr A Buckley
OBJ245/2	Proof of evidence on behalf of Mr A Buckley
OBJ245/3	Response to Chiltern's rebuttal by Mr A Buckley
OBJ246/1	Statement of Case of Natural England
OBJ246/2	Letter from Natural England to the Inspector dated 30 September 2010
OBJ246/3	Written representation by Natural England
OBJ246/4	Natural England's Advice on Bat Mitigation Plan (Version 2) dated 2 November 2010
OBJ246/5	Natural England's Update in relation to CRCL/P/10/E
OBJ246/6	Position statement by Natural England's in response to CRCL/INQ/48, CRCL/INQ/60 and CRCL/INQ/61
OBJ248/1	Statement of Case of Environment Agency
OBJ248/2	Note dated 23 September from the Environment Agency to the Inspector
OBJ249/1	Statement of Case of J J Gallagher Ltd
OBJ249/2W	Written representation on behalf of J J Gallagher Ltd (OBJ/249) , The Norman Trust (OBJ/192) and Land and Metropolitan International Developments (OBJ/257)
OBJ255/1	Proof of evidence of Peter Claye
OBJ255/2	Further proof of evidence of Peter Claye
OBJ255/3	Letter dated 22 January from Peter Claye to Ian Gilder
OBJ286/1	Proof of evidence of Wendlebury Parish Council
OBJ286/2	Closing submissions of Wendlebury Parish Council
OBJ293/1	Statement of Case of DB Schenker Rail (UK) Limited
OBJ293/2	Proof of evidence of David Bryett, DB Schenker Rail (UK) Limited
OBJ293/3	Rebuttal proof of evidence of DB Schenker Rail (UK) Limited
OBJ293/4	Plan of new Water Eaton Parkway Station relocated Stone Sidings
OBJ294/1	Proof of evidence by Richard Venables on behalf of Islip PC
OBJ295/1	Statement of Case of Professor Korsunsky
OBJ295/2	Proof of evidence of Professor Korsunsky
OBJ295/3	Rebuttal proof of evidence of Professor Korsunsky
OBJ295/4	Assessment and Modelling of vibration and noise by Professor Korsunsky
OBJ295/5	Train-track-soil-vibration interactions
OBJ295/6	Closing submissions of Professor Korsunsky
OBJ297/1	Statement of Case of Engage Oxford

OBJ297/2	Proof of evidence of Engage Oxford
OBJ297/3	Points and questions in rebuttal to the evidence of Chiltern Railways by Engage Oxford
OBJ297/4	Presentation of verbal summary by Engage Oxford
OBJ297/5	Suggested conditions by WGD Ltd on behalf of Engage Oxford
OBJ299/1	Statement of Case of Walton Bridge Moorings Ltd
OBJ311/1	Statement of Case of Kidlington Parish Council (now SUPP/18)
OBJ311/2	Proof of evidence Andrew Hornsby-Smith on behalf of Kidlington Parish Council
OBJ312/1	Proof of evidence of Nicola Blackwood MP
OBJ313/1W	Written representation of SS Philip and James School
OBJ314/1	Proof of evidence of Freeman of Oxford and Port Meadow Protection Group
OBJ314/1a	Further proof of evidence of Freeman of Oxford and Port Meadow Protection Group
OBJ314/1b	Summary Statement of Freeman of Oxford and Port Meadow Protection Group – Duplicate of OBJ314/1a
OBJ314/2	Rebuttal note on behalf of the Freeman of Oxford and Port Meadow Protection Group
OBJ314/3	Rebuttal note on behalf of the Freeman of Oxford and Port Meadow Protection Group
OBJ314/4a	Typed closing submissions on behalf of the Freeman of Oxford
OBJ314/4b	Closing submissions on behalf of the Port Meadow Protection Group
OBJ315/1	Proof of evidence of Edward Surridge
OBJ315/2	Environmental Noise and Health, Bernard Berry, April 1 2009
OBJ316/1W	Written representation of Jordan Hill Residents' Association
OBJ317/1	Proof of evidence of Ms Hoonie Feltham
OBJ318/1W	Letter dated 30 November 2010 from CPRE, Oxford City District to the Inspector regarding the objection by the Freeman and Port Meadow Protection Group
OBJ319/1	Proof of evidence of Paul Withrington
OBJ319/2	Errata sheet to Proof of evidence of Paul Withrington, received 3 January 2011
OBJ319/3	Response of Mr P Withrington to Chiltern Railway Rebuttal Proof CRCL/R/OBJ319
OBJ319/4	Supplementary evidence and response of Mr P Withrington to Chiltern Railway Rebuttal Proof CRCL/R/OBJ319
OBJ319/5	Article for the Railway Technology Magazine, author Mr P Withrington
OBJ319/6	Summary of Statement of Case of Paul Withrington
OBJ319/7	Map of Oxford area
OBJ319/8	Chiltern Railway's Accounts for the year ending January 2010
OBJ319/9	Supplementary evidence following cross examination, Paul Withrington
OBJ319/10	Supplementary evidence in preparation for closing, Paul Withrington
OBJ319/11	Supplementary evidence- train times in preparation for closing, Paul Withrington
OBJ319/12	Extracts from Britain's Transport Infrastructure – Strategic Rail Freight Network: The Longer Term Vision
OBJ319/13	Supplementary evidence- Paul Withrington
OBJ319/14	Closing submissions of Paul Withrington
OBJ319/15	Note by Paul Withrington dated 28 January 2011
OBJ320/1W	Written representation of Peter and Carol Jarvis
OBJ321/1	Proof of evidence of Wolvercote Commoners
OBJ321/2	Closing Submissions of Wolvercote Commoners
OBJ322/1W	Written representation of The Friends of the Trap Grounds
OBJ322/1W/1	Letter to Programme Officer dated 4 January including copy of

	Statement of Case, plan showing location of the Trap Grounds Town Green and aerial photograph of the Trap Grounds Town Green in North Oxford; red line indicates direction of unofficial path running north-south parallel to the railway tracks
OBJ323/1W	Written representation of Dr Corri Waitt
	Letters of objection from objectors 1 to 310: of which the following were subsequently withdrawn: numbers 10, 18, 20, 42, 43, 63, 64, 66, 81, 85, 94, 97, 98, 104, 108, 113, 117, 118, 128, 129, 137, 154, 159, 182, 184, 186, 187, 212, 221, 225, 227, 239, 240, 251, 254, 259, 289 and 299.

REPRESENTATION DOCUMENTS

REP7/1	Statement of Case of Jean Fooks
REP7/2	Proof of evidence of Jean Fooks
REP9/1	Statement of Case of Charlton-on-Otmoor Parish Council
REP9/2	Proof of evidence of Charlton-on-Otmoor Parish Council
REP9/3	Email exchange between Bruce Tremayne and Oxfordshire County Council's Senior Rights of Way Officer
REP9/4	List of the members of Charlton-on-Otmoor Parish Council
REP11/1	Statement of Case by Kemp and Kemp on behalf of the Oxford Preservation Trust
REP11/2	Proof of evidence of Deborah Dance on behalf of the Oxford Preservation Trust
REP11/3	Appendices to proof of evidence of Deborah Dance on behalf of the Oxford Preservation Trust
REP11/4	Report by RPS in association with the Oxford Preservation Trust
REP11/5	Proof of evidence of Robert Kinchin-Smith on behalf of the Oxford Preservation Trust
REP12/1	Statement of Case of Cyclists Touring Club
REP12/2	Response to Chiltern's rebuttal proof of evidence by Philip Ashbourn on behalf of Cyclists Touring Club
REP12/3	Response to Chiltern's rebuttal proof of evidence by Dave Holladay on behalf of Cyclists Touring Club
REP12/4	Extract from Cycle News, December/January 2011
REP13/1W	Written representation of Cherwell District Council
	Letters of representation from Representors 2 to 12, of which number 11 is withdrawn.

OBJECTIONS TO S19 – OPEN SPACE CERTIFICATE

OBJ/1000	Original representation by Venetia Hughes
OBJ/1001	Original representation by Oxford City Council
OBJ/1002	Original representation by Margaret Pelling
OBJ/1003	Original representation by Ian Salisbury