

**CHILTERN RAILWAYS (BICESTER TO OXFORD IMPROVEMENTS)  
TWA ORDER RESPONSE TO QUESTIONS OF CLARIFICATION**

Objector Name and Reference: Mr Ian Salisbury OBJ5/2

Date submitted: 5 October 2010

Date of Response: 12 October 2010

Response: Responses from CRCL are provided to the questions submitted. The Inspector in document X/6.2 issued on 5 October 2010 determined that certain questions were not questions of clarification and gave individual reasons for each one.

<b>Question Number</b>	<b>Response</b>
1.1	<p><i>Please say whether or not there has been any change in the Chiltern Railways Proposal with particular reference to the new low bridge shown on the Atkins drawing to take account of the evidence cited which appears to contradict the Draft Order.</i></p> <p>Chiltern Railways' original intention was to provide a bridge link to the allotments from the western approach ramp to the existing footbridge over the railway. However, Natural England objected to the proposal on the grounds that the structure would restrict access for cattle to the area to the east of it.</p> <p>Instead of providing the bridge link, Chiltern Railways proposes to raise the level of the existing public bridleway between the end of the ramp from the footbridge over the railway to the point where the bridleway intersects the elevated concrete track from Walton Well Road. The bridleway will be raised to the same level as the concrete track and will therefore substantially reduce the bridleways susceptibility to flooding. The bridleway provides access to the gate at the southwest corner of the allotments site. Raising the bridleway will also improve public access to Port Meadow.</p>
1.2	Not QoC
1.3	Not QoC
2.1	Not QoC
2.2	Not QoC
2.3	<p><i>Please confirm that Chiltern Railways are aware of the Thames Water objection</i></p> <p>Yes, Chiltern Railways can confirm that it is aware of the Thames Water objection [OBJ/60]</p>
2.4	Not QoC

Question Number	Response
3.1	<p><i>Re paragraph 1: Please explain what is meant by a 'broad capacity'</i></p> <p>Community Safety Partnerships Ltd (CSP) has the capability to offer strategic advice on programmes to reduce risk arising at level crossings generally and tactically on a location specific basis. Additionally, the Directors of CSP have experience of commissioning research in the field of level crossings and other aspects of behaviour on the railway. Furthermore, the directors have developed and run awareness campaigns in relation to the safe use of level crossings. Furthermore the company publishes LXinfo (<a href="http://www.lxinfo.org">www.lxinfo.org</a>).</p>
3.2	<p><i>Re Paragraph 3: Please confirm that 'the Clapham Accident' referred to is the accident that took place in Clapham, London, at 8:10 on 12 December 1988 as a result of signalling wiring errors, not involving a level crossing.</i></p> <p>Correct, the sentence when read as a whole relates to the prioritisation of safety related expenditure. The Clapham accident triggered the process to which Aidan Nelson refers to.</p>
3.3	<p><i>Re: paragraph 4: please provide a copy of the Operation Lifesaver philosophy referred to.</i></p> <p>The Operation Lifesaver philosophy is explained within the paragraph. Additionally, the Operation Lifesaver philosophy is one based on the contribution of a range of stakeholders including railway businesses, the regulator, state and local authorities, enforcement agencies and volunteers drawn from within the community. Further information can be found at <a href="http://www.oli.org">www.oli.org</a></p>
3.4	<p><i>Re: paragraph 4: Please provide a copy of, or web reference to the "blue book" and the Principals and Guidance referred to.</i></p> <p>The Blue Book was superseded by HSE Principles and Guidance 2E "Guidance on Level Crossings" in 1996. A copy has been made available as a core document (CD/3.1).</p>
3.5	<p><i>Re: paragraph 5: Please provide a copy of the "risk based management system".</i></p> <p>Aidan Nelson's evidence places no reliance on this system. However, the safety management system was broadly based because it considered train accident risk, other risks to passengers, occupational safety risks and risk to the public.</p>
3.6	<p><i>Re: paragraph 5: Please provide a copy of the "Red Runner" awareness and enforcement campaign in so far as that campaign relates to pedestrian (only) level crossings.</i></p> <p>Aidan Nelson's evidence is not reliant on "Red Runner". However, "Red Runner" was a video involving the reconstruction of a collision with a car on an active level crossing. This reconstruction was given wide media coverage at the time (1994 and subsequently).</p>

Question Number	Response
3.7	<p><i>Re: paragraph 8:</i> Mr Nelson is asked to explain why and in what way the prominence of risk arising at level crossings increased.</p> <p>A reduction in the range of risks within the direct control of the railway resulted in the proportion of risk attributed to level crossings rising between 2003 and 2007. In so far as pedestrian risk at level crossings is concerned the performance in 2007 was slightly above the five year average. However, in a broad sense, risk at level crossings was broadly constant and performance in 2007 was not statistically significantly different from that which had occurred in 2006.</p>
3.8	<p><i>Re: paragraph 8: If the former, please state whether there is any statistically significant evidence relating to the increase.</i></p> <p>Please see answer to 3.7 above.</p>
3.9	<p><i>Re: paragraph 14: Please described the meaning of 'modern form'</i></p> <p>A railway in modern form is one which is newly built or fundamentally reconstructed as if it were a new railway.</p>
3.10	<p><i>Re: paragraph 30: Please confirm that the title of the document referred to is "Attitudes to, and processes and funding for crossing closures in other countries" and not "Attitudes to, and processes and funding for crossing closures".</i></p> <p>Correct.</p>
3.11	Not QoC
3.12	Not QoC
3.13	Not QoC

**Question Response  
Number**

3.14 *Re: paragraph 42: Please describe the “components” mentioned in objective rather than relative terms.*

Ref: ALCRM User Guide  
Version: 1.0  
Date: 25/03/2008



Table 27: Individual Risk

Individual Risk Ranking	Upper Number	Lower Number	Upper Value Scientific Notation	Lower Value Scientific Notation
A	1 in 1	Greater than 1 in 1,000	1	1.00E-03
B	1 in 1,000	1 in 5,000	1.00E-03	2.00E-04
C	1 in 5,000	1 in 25,000	2.00E-04	4.00E-05
D	1 in 25,000	1 in 125,000	4.00E-05	8.00E-06
E	1 in 125,000	1 in 250,000	8.00E-06	4.00E-06
F	1 in 250,000	1 in 500,000	4.00E-06	2.00E-06
G	1 in 500,000	1 in 1,000,000	2.00E-06	1.00E-06
H	1 in 1,000,000	1 in 2,000,000	1.00E-06	5.00E-07
I	1 in 2,000,000	1 in 4,000,000	5.00E-07	2.50E-07
J	1 in 4,000,000	1 in 10,000,000	2.50E-07	1.00E-07
K	1 in 10,000,000	1 in 20,000,000	1.00E-07	5.00E-08
L	Less than 1 in 20,000,000	Greater than 0	5.00E-08	Greater than 0
M	0	0	0	0

Table 28: Collective Risk

Collective Risk Ranking	Predicted FWIs per year	Predicted FWIs per year	Upper spend per year	Lower spend per year
1	Theoretically infinite	Greater than 5.00E-02	Theoretically infinite	£78,650.00
2	5.00E-02	1.00E-02	£78,650.00	£15,730.00
3	1.00E-02	5.00E-03	£15,730.00	£7,865.00
4	5.00E-03	1.00E-03	£7,865.00	£1,573.00
5	1.00E-03	5.00E-04	£1,573.00	£786.50
6	5.00E-04	1.00E-04	£786.50	£157.30
7	1.00E-04	5.00E-05	£157.30	£78.65
8	5.00E-05	1.00E-05	£78.65	£15.73
9	1.00E-05	5.00E-06	£15.73	£7.87
10	5.00E-06	1.00E-06	£7.87	£1.57
11	1.00E-06	5.00E-07	£1.57	£0.79
12	Less than 5.00E-07	Greater than 0	£0.79	≈ £0.00
13	0	0	0	0

3.15 Not QoC

3.16 Not QoC

3.17 Not QoC

3.18 *Please objectively explain the ALCRM ranking system (both letters and numbers) in plain English by reference to the perceived absolute risk of an accident occurring.*

Please see response to 3.14.

Question Number	Response
3.19	<p><i>Please explain how the ALCRM risk ranking outputs made for the level crossing at Aristotle Lane show that (a) leaving the crossing in situ, and (b) extending it across the new line with a refuge between the existing and extended crossing, is unacceptable when applied to the re-construction of the railway in modern form.</i></p> <p>The distance between the existing Aristotle Lane level crossing and the to be reconstructed railway means that there would be two separate level crossings were the new infrastructure to be crossed at grade. As the new line constitutes a railway in modern form on which there should, in other than exceptional circumstances, be no new level crossings. The situation at Aristotle Lane does not constitute an exceptional circumstance as the Order Scheme proposes a viable alternative route across the railway to be reconstructed in modern form and the extant railway. Accordingly, closure of the existing level crossing is proposed as it would serve no purpose if the Bicester to Oxford Railway is reconstructed as per the Order Scheme.</p>
3.20	Not QoC
3.21	Not QoC
3.22	Not QoC
3.23	Not QoC
3.24	Not QoC
3.25	Not QoC
3.26	<p><i>Re: paragraph 53: Please provide separate data for private pedestrian level crossings or, if this is not available, pedestrian level crossings.</i></p> <p>The nature of fatalities by type of crossing is contained within sections 9.2.5 and 9.2.6 of the RSSB ASPR for 2009/10 which has been provided as a core document <b>(CD3/35)</b>.</p>
3.27	<p><i>Re: paragraph 55: Please say whether the figure of 38 relates to all parts of the United Kingdom and whether it includes tramways, London Underground Trains and other special cases apart from the public railway network.</i></p> <p>The context of the statistics quoted is set in paragraph 49 of Aidan Nelson's evidence <b>(CRCL/P7/A)</b>, as such it relates solely to Network Rail managed infrastructure.</p>
3.28	<p><i>Re: paragraph 55: please say how many of these fatalities occurred within the public railway network at pedestrian level crossings with private rather than public rights similar to the Aristotle Lane crossing, and</i></p> <p>The statistics provided within the RSSB ASPR for 2009/10 do not distinguish between public and private footpath level crossings.</p>
3.29	<p><i>Re: paragraph 55: please say how many of this type of crossing there are on the railway network.</i></p> <p>This information is contained within Appendix Four of the RSSB annual safety performance report for 2009/10 <b>(CD3/35)</b>. This source shows the number of footpath level crossings at December 31<sup>st</sup>, 2009 to have been 2,462.</p>
3.30	Not QoC
3.31	Not QoC

Question Number	Response
3.32	Not QoC
3.33	<p><i>Re: paragraph 84: please explain the difference, by reference to objectively assessed risk and probability, between an “intolerable risk” and a “remaining risk”.</i></p> <p>In statute, the Health and Safety at Work Act 1974, does not define a numeric boundary between intolerable risk and remaining risk. However, the Health and Safety Executive has provided guidance which suggests that a risk of death of 1 in 10,000 or worse is unacceptable and therefore where an activity should cease until risk can be reduced below the threshold. Over and above this, the statutory responsibility is to reduce risk so far as is reasonably practicable.</p>
3.34	<p><i>Re: paragraph 84: please explain what “step change opportunity” means.</i></p> <p>A step change opportunity is one where there is a fundamental change to the configuration of the railway through, for example, the complete renewal of a signalling system or significantly increased line speed. The Order Scheme sets out to do both and is therefore a step change opportunity at which it is appropriate to undertake works which may not have been reasonably practicable in a steady state situation.</p>
3.35	<p>Mr Nelson is also asked to explain where the statutory requirement is set out in statute</p> <p>There is no statutory definition of a “step change opportunity”. Rather there is in the Health and Safety at Work Act 1974 a general duty to reduce risk so far as is reasonably practicable.</p>
3.36	<p><i>Please indicate, with reference to relevant documentation, when it would be considered impracticable to close a level crossing.</i></p> <p>There is no statutory test for when it would be impracticable to close a private level crossing. It is considered that it would be impracticable to close a private level crossing where:</p> <p>(1) the closure of the level crossing would leave the person(s) having rights of user without an existing reasonable alternative means of crossing the railway; and</p> <p>(2) in all the circumstances of the case, closure without providing a reasonable alternative means of crossing the railway would have a disproportionate and adverse effect on those person(s) and that compensation would not be an adequate remedy; and</p> <p>(3) no reasonable alternative means of crossing the railway can be provided either because it would not be feasible to do so or because a reasonable alternative means of crossing the railway can only be provided at a cost which is disproportionate in relation to the safety and other benefits gained by the closure of the crossing.</p> <p>Each case must be considered individually. Decisions about level crossing closure should be taken within the context of national policy and take account of all relevant local circumstances. In the case of the Aristotle Lane Level Crossing a key factor is that a level crossing cannot be provided over the railway to be reconstructed in modern form (see response to 3.19).</p>

Question Number	Response
3.37	Not QoC
3.38	<p>Mr Nelson is asked to confirm whether Mr Salisbury's understanding of the first sentence in the source is correct</p> <p>Mr Salisbury's reference to "deficient siting lines" is incorrect. Aidan Nelson's proof of evidence, in paragraph 137, refers to "deficient sighting times".</p> <p>The specific data pertaining to the existing Aristotle Lane level crossing has been requested from Network Rail. An explanation of the principles used in determining whether a whistle board or whistle boards are required is to be found in the response to point 3.42.</p>
3.39	Not QoC
3.40	Not QoC
3.41	Not QoC
3.42	<p><i>Re: paragraph 143: please provide distance for the "restricted sighting" in every instance (up and down; new and existing lines). Please explain with reference to permitted train speeds why the sighting is "restricted".</i></p> <p>Sighting times are deficient when the time required to take a decision to cross and cross the railway safely is less than the time it would take for the fastest permitted train to travel from the position at which it can be seen by a person at a decision point at the crossing to the level crossing. Where sighting times are deficient, whistle boards can be positioned to allow train horns to be sounded to extend the time taken by the fastest train to reach the level crossing beyond the sum of the required decision and crossing time.</p> <p>The figures pertaining to the deficient sighting times associated with the existing Aristotle Lane have been requested from Network Rail.</p>
3.43	<p>Mr Nelson is asked to indicate the normally required distances in the circumstances Mr Salisbury describes</p> <p>Please see the response to 3.42.</p>
4.1	Not QoC

Question Number	Response
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4.2 *Given the ability to accommodate a single track only through Wolvercote Tunnel and a journey time from Oxford to Water Eaton of just a few minutes, please explain the necessity for any new track between Oxford and the new North Oxford Junction. Please say whether or not the planned timetable could be accommodated on the existing lines, if necessary by adjusting the signalling provision.*

The purpose of providing a new track between Oxford North Junction and Oxford station is to physically separate trains on the London Marylebone – Oxford route from those using the Didcot – Banbury line. This maximises the timetable flexibility for the London Marylebone – Oxford services over this section by avoiding the need to fit these additional trains between the services using the Didcot – Banbury line. This is particularly important given other timetabling constraints on the route from Marylebone to Oxford such as the need to fit between other services on the section south of Bicester and, prior to implementation of Phase 2B of the Order scheme, the single track section between Islip and Bicester.

The other reason for seeking to separate the proposed London Marylebone - Oxford services from other services in the Oxford area is to ensure timetable reliability. The Didcot – Banbury line is used by a broad range services from locations including London, the South Coast, Birmingham and the North of England. Many of these services are exposed to significant opportunities to incur delays because of the length of journey they are undertaking and the interaction with a vast array of other services at complex and congested locations such as Reading and Birmingham New Street. If the London Marylebone – Oxford services were to use the Didcot – Banbury line tracks between Oxford North Junction and Oxford station, it would be possible, for example, for a late running Newcastle – Reading train to delay a service to or from Marylebone. This train could then go on to delay other services operating to and from Marylebone. As a result, an operating incident that occurred, say, in York, could delay services in and out of London Marylebone. The ability to operate a reliable passenger service on the routes to and from London Marylebone is essential to the viability of scheme.

4.3 Not QoC

4.4 Not QoC

4.5 *Please state the distance between the centre-line of the Jericho down line and the new Bicester line, as currently proposed, at the Aristotle Lane level crossing.*

The exact distance between these two tracks will be determined during the detailed design phase. The outline design work that has been undertaken to date has resulted in a design that has a distance of 14m between the centrelines of the proposed new track and the existing Down Jericho track at the site of Aristotle Lane crossing. This distance is likely to be reduced (possibly by as much as 2m) during the next phase of design work in order to facilitate an access route for road vehicles used in connection with maintenance of the existing railway.

Question Number	Response
4.6	<p><i>Please say which allotment holders will find the route across the footbridge to be shorter than the route across the level crossing.</i></p> <p>Paragraph 1.12 does not state that the route will be shorter for any allotment holders. The existing route from Aristotle Lane (measured from the point where the path to the foot crossing and the path to the footbridge diverge) to plots in southwest corner of the allotment site is approximately the same. (This is based on the use of what appears from aerial photography to be the shortest available route through the allotment site between plots rather than by using the wider paths provided around groups of plots).</p> <p>Oxfordshire County Council has plans to expand SS Philip and James school. The proposed expansion will result in diversion of the existing route from Aristotle Lane to the foot crossing, increasing the length of the route to the allotments via the foot crossing (by approximately 15 to 20m) in consequence. This will result in the route via the footbridge to certain plots at the southwest of the site being slightly shorter.</p>
4.7	<p><i>Please state over what length of each of the ramps the “average gradient” has been calculated.</i></p> <p>The proposed refurbishment of the existing footbridge will include works to re-profile and resurface the existing approach ramps. It is intended that the re-profiled ramps will consist of a series of 6m long constant-gradient ramps with 2m long level sections between them. The exact gradient of each section of ramp will vary because of the variability of the gradient of the existing ramp profiles and the interface between the ramp and other features (such as the brick wall which adjoins the south side of the eastern ramp). However, it is intended that the average gradient calculated as the change in height measured from the bridge deck to the foot of the ramps divided by the total length of ramped path (ie. ignoring the level sections) will be in the region of 1 in 17. The precise average gradient together with the gradient of each individual section of ramp will be determined during the detailed design phase.</p>
4.8	<p><i>Please state the gradient and length of each section of each ramp between the level rests. Please provide the gradient (if any) and length of each rest on each ramp.</i></p> <p>See answer to 4.7.</p>
4.9	Not QoC
4.10	Not QoC