

**PROPOSED CHILTERN RAILWAYS (BICESTER TO OXFORD IMPROVEMENTS)
ORDER**

CHILTERN RAILWAYS' REBUTTAL PROOF OF EVIDENCE

IN RELATION TO THE OBJECTION AND EVIDENCE OF

DAVID DAVIES

1 Introduction

- 1.1 This rebuttal proof of evidence has been prepared on behalf of the Chiltern Railway Company Limited (Chiltern Railways) to respond to particular aspects of the objection and written representation of David Davies.
- 1.2 In particular, David Davis has raised points in his written representation provided for the Inquiry that Chiltern Railways had not previously addressed in the proofs of evidence prepared by their witnesses, which were submitted to the Inspector and to certain objectors on 1 October 2010.
- 1.3 It is not intended that this rebuttal proof should repeat material that the witnesses for Chiltern Railways have already covered in their evidence. Cross-references to relevant paragraphs of those witnesses' proofs of evidence are given below, where appropriate.
- 1.4 It is intended that this rebuttal proof should be a composite response by Chiltern Railways to those new points raised in the written representation of David Davies and referred to above. The name of the Chiltern Railways witness who is responsible for each aspect of this rebuttal proof is given at the beginning of each section below.

2 Defined Terms

- 2.1 The following defined terms are referred to throughout this rebuttal proof:

"the Correspondence" means correspondence in the form of letters exchanged between Chiltern Railways and David Davies dated 6 February 2010, 30 June 2010, 9 July 2010, 20 October 2010 and 2 November 2010 attached as Appendix A to this rebuttal proof;

"the Objector" means David Davies;

<i>“the Objector’s evidence”</i>	means the written representation of David Davies;
<i>“the Order application”</i>	means the application for the proposed Order submitted on 6 January 2010 and the Proposed Modification dated 9 September 2010; and
<i>“the proposed Order”</i>	means the proposed Chiltern Railways (Bicester to Oxford Improvements) Order.

3 Chiltern Railways’ Rebuttal of the Objector’s Evidence

Context

- 3.1 The Objector lives at 22 Mill Street, Islip. The Objector’s evidence is concerned with the impacts, mitigation and possible alternatives of the proposed Mill Lane Crossing, Islip.

Alternative Pedestrian Underpass, Ian Gilder

- 3.2 The Objector states that a pedestrian underpass rather than a bridge is far preferable at Mill Lane, as its effect on the rural setting of Islip will be much less than the proposed bridge. The Objector states that this option does not seem to have been fully considered.
- 3.3 This option was fully considered in the Islip Mill Lane Level Crossing Replacement Alternatives Report [Appendix IMG 19 to **CRCL/P/12/B**]. For the reasons set out in this report the subway was not the preferred option and Chiltern Railways continue to promote the bridge proposed in the Order Scheme.

Mitigation of Visual Impacts of the Mill Lane Bridge, Ian Gilder

- 3.4 The Objector states that should the bridge be constructed, then its visual impact on neighbouring properties needs to be mitigated by tree planting on the eastern, southern and northern aspects of the proposed bridge and its approach embankments as illustrated in Photomontage 4 in the *Islip Mill Lane Level Crossing Replacement Alternatives Report*, which forms Appendix IMG 19 to Ian Gilder’s evidence [**CRCL/P/12/B**]. The Objector states that the photomontage depicts a summer scene, 10 years after construction and the structure will have much bigger effects in the winter and in the interim years. The Objector states that screening of adjacent properties to prevent overlooking from the bridge is essential.
- 3.5 Chiltern Railways are committed to providing tree planting on the proposed bridge through condition 5 and 6 of **CD/1.12/2**.

Noise Impacts, Michael Fraser

- 3.6 The Objector states that the impact of train noise on the village seems to be discounted by Chiltern Railways in its submission and mitigation measures have been dismissed as having worse impacts than the noise itself. The Objector states

that there are means of minimising the noise of high speed trains and these should be implemented at the approaches to and in the village.

- 3.7 It is necessary to consider both the benefits and the dis-benefits of noise barriers when considering the most appropriate form of noise mitigation in an area, and the potential adverse visual impacts of noise barriers were considered in the ES [CD/1.16] to be sufficient to outweigh the benefits. This was based on initial consultation with residents and since that time, it has been decided that a barrier will be provided where it is justified in Islip, taking account of the further views from residents. The height of the barrier has been kept to a minimum as a compromise. Chiltern Railways has written to the Objector on 2/11/10 detailing the noise levels that are predicted at his property based on detailed noise modelling. The predicted noise levels show that even without mitigation no significant noise impacts are predicted. No mitigation is therefore required to protect the Objector's property.

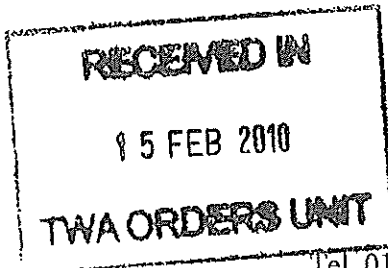
4 Conclusion

- 4.1 This rebuttal proof responds comprehensively to the evidence presented by the Objector. Chiltern Railways promote a bridge, as presented in the Order Scheme, with landscaping and have agreed to a noise barrier, where necessary, following consultation with local residents.

Appendix A

CRCL/R/OBJ100

Relevant Correspondence
between Chiltern Railways
and the Objector



085/100

22, Mill Street, Islip, Oxon, OX5 2SY
Tel. 01865 377 492. e-mail: drdaviae@btinternet.com

06/02/10

The Secretary of State for Transport
Department for Transport
TWA Orders Unit Zone 1/31
Great Minster House
76 Marsham Street
London SW1P 4DR

Dear Sir,

Re. EVERGREEN 3. CHILTERN RAILWAYS (BICESTER TO OXFORD IMPROVEMENTS) ORDER PROPOSED ISLIP CROSSING EQUESTRIAN/PEDESTRIAN BRIDGE WORK

I wish to support the proposal to close the level crossing, in order to avoid the safety risks associated with high speed trains and barred or gated crossing. The possible resulting access problems that could affect Mill Street can be solved in other ways.

The general feeling of residents was that a modest pedestrian bridge was desirable at the site or to the west of the crossing but this does not extend to favouring the 360metre long structure which is proposed as an Equestrian/Pedestrian bridge costing some £1.5 million and involving the sacrifice of several acres of agricultural land

I object to the construction of this bridge it as it is proposed because:-

1. It is out of proportion to the possible benefits which may be gained.
2. The bridge will overlook and diminish the privacy of houses in Mill Street (most notably The Grange and Prospect House).
3. The bridge and associated structures will alter the character of the agricultural land in the green belt on which it stands. The conversion of green field agricultural land to brown field railway land is undesirable unless absolutely necessary.
4. The land on which the structure will stand to the east of the crossing abuts the conservation area and will have a deleterious effect on the surroundings of the conservation area.
5. The necessity for lighting on the proposed structure is not mentioned in the documents. If this became necessary, as is probable it would have a considerable environmental impact, not least on the adjacent conservation area.
6. The need for an equestrian crossing has not been demonstrated. The fact that the bridge would lead only to a busy main road without a sidewalk makes it unlikely that the bridge would get more than minimal equestrian use.

Our Ref: PC/P3.2.3.145.1/EG3/001
Your Ref:

Mr D.R. Davies
22 Mill Street
Islip
Oxon
OX5 2SY

Dir Tel – 07900 052307
E-mail – paulclarke@ardent-
management.com

30th June 2010

Dear Mr Davies,

**Draft Chiltern Railways (Bicester to Oxford improvements) Order
Objection number 100**

I refer to your letter dated 6/2/10, addressed to the Secretary of State for Transport, setting out your points of objection to the Order application for the above project. The following are Chilterns responses to these points.

Bridge

With regards to the requirement for a bridge in this location, Chiltern received no support for the proposal from residents of Islip as you say, but the following responses were received leading to the proposal of a bridge:

- County Council PROW team - wanted to keep open a crossing suitable for horses and pedestrians – did not specify a bridge;
- Ramblers Association – wanted to keep open a crossing suitable for horses and pedestrians – did not specify a bridge;
- Oxford Fieldpaths Society - wanted to keep open a crossing suitable for horses and pedestrians – did not specify a bridge;
- Islip Parish council – wanted a pedestrian bridge across the crossing.

Due to the large amount of support for keeping a crossing point here, a footbridge had to be proposed. Due to the location of the crossing here, on the edge of a developed area, any footbridge will have to be Disability Discrimination Act compliant, meaning that it is accessible to wheelchairs and the mobility impaired. The additional requirement for horse access has not altered the form of

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the bridge to a large degree. It was considered that a steel structure would not be appropriate due to the noise that would be created by hooves on the structure. The proposed bridge is therefore thicker to reduce such noise.

Chiltern has received a lot of adverse comments from within Islip about the proposed location of the new footbridge that is proposed to replace the existing level crossing. Many people would like it to be on the other side of Mill Street from where it is proposed to be, within the Order powers sought. Chiltern is considering this further and it is intended to meet with all people who have an interest in the location of the bridge in the near future to discuss this proposal. The engineers are also considering designs for a bridge along the current highway, so that a comparison can be made. These proposals must also be considered in the light of the perceived need for a footbridge here. A bridge was certainly not Chiltern's starting point here. Please let me know if you would like to be included in this meeting.

Noise

The ES submitted as part of Chiltern's Order application considers noise impacts from the scheme in Volume 2, Section 6. A copy of the application documents can be seen on the project website at www.chiltern-evergreen3.co.uk.

The properties in Mill Street are described as Receptor 12 in the noise evaluation. The impacts will differ dependent upon how close properties in the road are to the railway, this receptor is the closest property to the line. The following are the expected impacts on the 3 properties closest to the track.

Tables 6.12 and 6.13 show that without mitigation noise increases are predicted after Phases 1 and 2. Table 6.14 shows that the noise impacts predicted do not reach such a level that statutory noise insulation is required to properties in Mill Street. It should be borne in mind that at present although the trains are slower and there are fewer of them, they are running on very old infrastructure. The tracks and ballast will be replaced as part of the works in this area. The renewal of track is likely to reduce noise levels.

Chiltern Railways has chosen to put in place non-statutory noise mitigation measures in addition to those required under legislation. These are set out in the ES, as is summarised below.

Noise will be minimised at source, in addition to the effects of the new rail and ballast set out above, by ensuring a high standard of maintenance during the operating life of the railway to avoid noise levels increasing unnecessarily due to wear and tear of the wheel and rail surfaces. The track will therefore be maintained by Network Rail to standards that are compatible with an upgraded railway.

Chiltern Railways carries out regular inspections of train wheel profile and condition, and has recently built a wheel lathe at its Aylesbury Depot so that regular wheel maintenance can be carried

out. This in-house facility enables wheel flats and other defects to be corrected soon after detection, without waiting for lathe capacity to become available elsewhere.

A noise barrier has not been specified here, as other means of mitigation are thought to be a more appropriate solution than a long barrier in this location. Section 6.5.2 of the ES sets out why barriers are not always thought to be appropriate. In this case a long length of barrier was thought likely to be unsightly. Other noise control measures that reduce noise "at source" including the use of rail dampers will be considered to lessen noise. Where mitigation at source still results in "High" noise impacts, acoustically upgraded double glazing will be implemented.

Table 6.22 shows that even for the worst affected receptors in Phase 1 the highest predicted impact without mitigation is classed as "Substantial". In numerical terms a noise impact of 8dB is predicted. However, this excludes the effect of any further at-source mitigation measures that will be investigated during detailed design. Whilst this would be a noticeable increase in noise levels it is still below levels at which statutory or non-statutory noise insulation would be applied, and is less than 10 dB above the stringent noise thresholds in the ES. A 10dB increase is the equivalent of a doubling of the noise experienced. It should also be noted that the noise thresholds in the ES represent the onset of disturbance rather than an unacceptable level.

If and when the East West Rail project goes ahead the unmitigated noise predictions are higher, and mitigation will be required under Chiltern Railways non-statutory commitments in the ES. For this Phase 2 scenario, the unmitigated impact is predicted to be "High", at 15dB. In this case non-statutory noise mitigation will be considered at the closest properties to bring this down to an acceptable level within the buildings. The insulation package would include appropriate ventilation to allow windows facing the railway to remain closed. The effect of the upgraded glazing system would be expected to be sufficient to reduce internal noise levels to be approximately the same level that would exist if no significant noise impacts were predicted externally (i.e. a reduction in internal noise levels of around 10 to 15 dB(A) compared to a standard openable glazing system).

Noise mitigation measures that will actually be implemented will be determined during detailed design. Mitigation will be put in place for other properties if levels are expected to reach those as set out in the ES as requiring mitigation.

However, it is appreciated that some residents would prefer a noise barrier to be erected to mitigate noise impacts. This is not proposed in the ES, as above, due to the unacceptable visual impact that some people may see as a result. Chiltern has decided that it will canvas local opinion on this issue from those who have raised noised objections, before deciding what form of mitigation will be implemented. I have attached pictures of noise barriers of the type that would be appropriate here. Please let me have your views on whether you would prefer infrastructure based mitigation as described above, with noise insulation to appropriate properties, or a noise barrier as in the attached

example pictures. The main benefits of the latter for your property will be the increased noise mitigation outside properties.

Please contact me if you would like any further information or if you would like to discuss the above further. Please also let me know if you would like to be involved in the proposed site meeting and if you have a view about the provision of a noise barrier.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'P. Clarke', written in a cursive style.

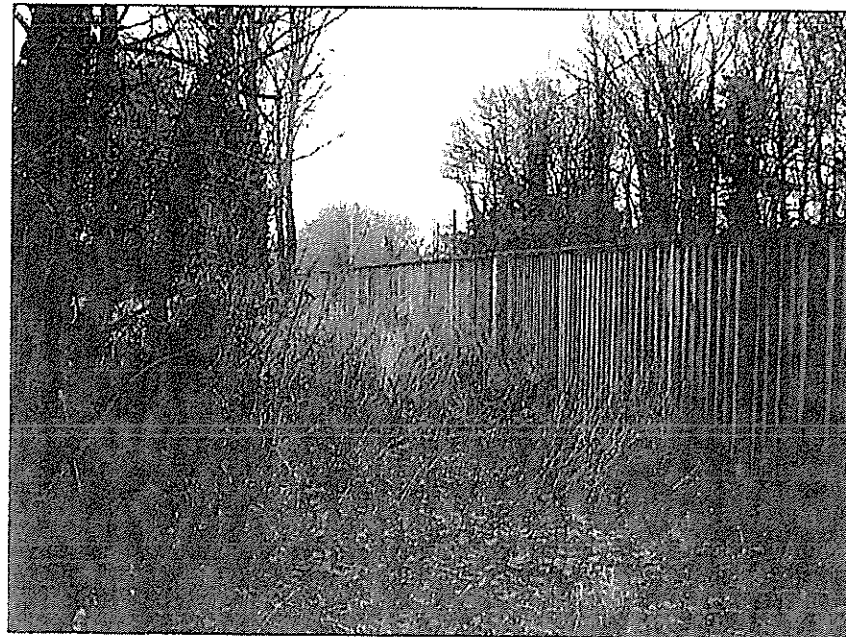
Paul Clarke
Associate director

cc C Baker ERM
Enc Noise barrier

Figure 3.15: Noise Barrier from the Track Side



Figure 3.16: Noise Barrier from the Field or Property Side



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Ekip
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OXON OX5 2SY.
GBJ 99/100

Paul Clarke,
Associate Director
Ardent Management Ltd,
P O Box 3050
Wokingham
Berkshire RG40 3YD.

6th July 2020.

Dear Mr. Clarke,

Re: Draft Chiltern Railway (Bicester to Oxford improvement) or
Objection no. 99.

Thank you for your letter dated 30 June 2020.

① Proposed meeting re location of bridge.

I would like to be included in this meeting.

② Noise barrier

I am very concerned regarding the increased noise levels both within the house and outside in the garden. Therefore I would like to see as much done as possible to mitigate the noise levels in both areas, rather than either one

as the other alternative.

If the noise barriers were in place I would think they could be screened with trees and shrubs to make them less unsightly.

(3.) Lighting Issues

I raised in my letter the question of whether lighting will be required for the proposed bridge. This was not addressed in your letter to me.

I would like to know whether it will be lit. If lighting were required for health and safety reasons it would be a major intrusion into a ~~quiet~~ rural area and of great concern to neighbouring properties.

D. Bridge proposal in general

I would like to reiterate my view that such a bridge is simply not necessary in this guise. Surely the money could be better spent, and common sense prevail.

Yours sincerely

Susan A. Davis.

20 October 2010

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Email ian.gilder@erm.com

Your ref: OBJ/99 and 100

Dear Mr and Mrs Davies

Proposed Chiltern Railways (Bicester to Oxford Improvements) TWA Order

I write to you as an objector to the Chiltern Railways TWA Order. Specifically, you have raised concern about the effect of noise and/or vibration of the proposed Scheme and its impact on your property.

Chiltern Railways is committed to using the Best Practicable Means to design the railway so as to avoid significant noise and vibration impacts. Enclosed is the *Chiltern Railways (Bicester to Oxford Improvements) TWA Order Draft Noise and Vibration Mitigation Policy (October 2010)*, which sets out Chiltern Railways' commitment to control noise and vibration impacts in detail. This document will be finalised following consideration of improvements that are identified during the Inquiry.

The assessment of operational noise in the ES formed a worst-case view of the likely noise impacts, which was a satisfactory approach for the ES. However, the design of the Scheme has progressed as contemplated in the ES, so that lesser, or equivalent, impacts will result, and the likely mitigation has been refined to take account the current information and the views of stakeholders who have been consulted since the ES was published. That approach is integral to the Environmental Impact Assessment (EIA) process. This work is ongoing, and we intend to write to you in the near future to confirm the likely noise impacts at your property.

We hope that this policy, which will be legally enforced by planning condition, will satisfy your concerns regarding noise and vibration, and that you will be able to remove your objection to the Scheme.

Yours sincerely,

Ian Gilder

Ian Gilder
Head of Planning

For and on behalf of the Chiltern Railway Company Ltd

obj / ~~100~~ 100

02 November 2010

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Your ref: OBJ 99 and 100

Dear Mr and Mrs Davies

Proposed Chiltern Railways (Bicester to Oxford Improvements) TWA Order

You have objected to the application for the above Order and this letter is a further response to your concerns about the effect of noise and/or vibration of the proposed Scheme and its impact on your property.

Noise levels were raised as a concern and a letter was sent to you on 30 June 2010 to address this.

Since the Environmental Statement ("ES") was published and the letter of 30 June further refined noise modelling and monitoring have been carried out.

Chiltern Railways is committed to using the Best Practicable Means to design the railway so as to avoid significant noise and vibration impacts. You have recently been sent the *Chiltern Railways (Bicester to Oxford Improvements) TWA Order Noise and Vibration Mitigation Policy (October 2010)*, which sets out in practical detail Chiltern Railways' commitment to control noise and vibration impacts.

The purpose of this letter is:

- to report the noise effects specifically at your property based on the refined noise modelling and monitoring carried out since the ES;
- to explain the noise mitigation that will be provided as a result of the Noise and Vibration Policy being implemented, noting that the final form of mitigation will be determined during detailed design before the Scheme is operational; and
- to explain the residual effect of noise with this mitigation in place.

The effect of noise from the trains on persons at a property in an area depends on the nature of the area being considered. In built up areas, where noise levels are already high, the effect of a new noise source tends to depend on the change from the existing ambient noise level. In more open areas, with very low ambient noise levels, the effects of a new noise source on people tends to depend on how loud the noise is in isolation. So in such open areas, the noise from the trains is compared to an absolute threshold level, and the impact is assessed based on the amount by which the train noise is likely to exceed that level.

The effect of the predicted noise from trains on your property assessed below is based on your property being situated in an open area, but one which is only affected by low noise levels from trains so that noise change determines the impacts.

Table 1 Predicted Noise Impacts of the Scheme (Based on the Refined Noise Modelling and Monitoring)

Location	Noise Impact over Period Shown (dB)	
	Day	Night
OBJ99/100		
1 Existing noise level ($L_{Aeq, Period}$)	45	38
2 Future noise impact without mitigation	0	0
3 Mitigation proposed	No mitigation required	
4 Future noise impact with this mitigation	0	0
5 Change in noise impact as a result of mitigating the scheme (item 4 compared with 2).	0	0

At your property no increase over current ambient noise levels has been predicted. Since this impact is not significant, further mitigation is not required.

To explain what this means, the smallest change in noise level that is noticeable under normal listening conditions (ie not in a laboratory) is 3 dB. The noise impact at this property has been classed as "none " because it is not expected to have a significant effect even at the highest window of your property.

In terms of vibration Page 6-42 of the ES highlighted that levels of ground vibration are not expected to exceed the stringent assessment criterion beyond approximately 10 m from the tracks. This criterion is based on levels in BS6472 for a low probability of adverse comment. Your property is beyond this distance from the tracks and vibration is not expected to result in significant disturbance based on these stringent thresholds. Measurements of existing vibration carried out since the ES was written have confirmed that no structural or cosmetic damage to property will occur as a result of train vibration whether within 10m of the line or further away.

We hope that you find this information useful and that it addresses some of your concerns regarding the scheme.

Yours sincerely,



Ian Gilder
Head of Planning

For and on behalf of the Chiltern Railway Company Ltd