

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

CHILTERN RAILWAYS' REBUTTAL PROOF OF EVIDENCE

**IN RELATION TO THE OBJECTION AND EVIDENCE OF
BETH FORROW**

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 evidence of Beth Forrow.
- 1.2 In particular, Beth Forrow has raised points in her 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 evidence of Beth Forrow 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 Beth A Forrow dated 28 October 2010, 16 July 2010, 28 October 2010 and 15 November 2010 attached as Appendix A to this rebuttal proof;

"the Objector" means Beth Forrow;

<i>“the Objector’s evidence”</i>	means the written representation of evidence of Beth A Farrow;
<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 Whimbrel Close, Bicester, Oxfordshire. The Objector states that the boundary of her property is shown in Table D2.3 of Volume 4 of the Environmental Statement [CD/1.18] as being 9 metres from the proposed railway line. This reference however relates to *Receptor 3* (12 Whimbrel Close) which was chosen as part of the ES noise assessment as a worst case property representing the properties in this area. The figure of 9 metres represents the distance from *Receptor 3* to the existing railway. The façade of Whimbrel Close is situated nearby, at a distance of approximately 5 metres from the proposed railway line (set back slightly when compared to *Receptor 3*).

Construction and Operational Noise Impacts, Michael Fraser

3.2 The Objector states that her understanding is that there is potential for up to 12 trains per hour to use the line. The Objector states that her property is also close to the site of the Tubbs Lane footbridge and the temporary construction compound in the same area and, consequently, her home risks being seriously affected, particularly by noise, during construction and permanently once the new train services become operational.

3.3 The Objector quotes from the letter of 16 July 2020 from Ardent that *“mitigation will be provided in the form of noise barriers to protect the ground floor” in Phase 1 “if noise levels are expected to reach these noise levels following detailed design”*. The letter says that it is ‘extremely likely’ that the noise barriers will be implemented from Phase 1. The Objector states her understanding that eligibility for statutory insulation will depend on the implementation of Phase 2. Given the position of her property, the Objector is seeking either a planning condition or through the Code of Construction Practice for a noise barrier to be erected at the outset and additional insulation be considered in advance of Phase 2.

3.4 Eligibility for noise mitigation will be determined according to the procedures set out in the Noise and Vibration Mitigation Policy [CD/1.29]. Eligibility will be determined during detailed design and will be installed in accordance with draft planning condition 17 [CD/1.12.2]

3.5 *“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 impacts during Phase 2B and details of proposed monitoring and mitigation measures, which achieve the standards for noise and vibration attenuation set out in the Noise and Vibration Mitigation Policy, has been submitted to and approved by the local planning authority. 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 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 Chiltern Railways resume a passenger rail service on that Section of railway. Any monitoring of noise and vibration shall be undertaken in accordance with the approved scheme of assessment.

Before the commencement of the laying of the second track between the MoD Depot at Bicester and Islip, which is the principal component of the Phase 2B works, 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, which achieve the standards for noise and vibration attenuation set out in the Noise and Vibration Mitigation Policy shall be submitted to and approved by the local planning authority. 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 1996, required for Phase 2B shall be undertaken as soon as possible after commencement of the works and no later than the date on which the second track is brought into use. Any monitoring of noise and vibration shall be undertaken in accordance with the approved scheme of assessment. “

- 3.6 The predictions in the ES [CD/1.16] indicate that a noise barrier is likely to be required to mitigate noise impacts at ground floor from Phase 1 of the Scheme. However, the detailed timing of the installation of this barrier has not yet been developed, but the commitment to install the mitigation as soon as possible after the commencement of the works recognises the advantages of having barriers that are designed to reduce operational noise in place where it might also reduce construction noise.

Vibration Impacts, Michael Fraser

- 3.7 The Objector states that in a letter from Ardent, Chiltern Railways' property agents, on 16 July 2010 it is acknowledged that vibration may be a possible problem at the properties on Whimbrel Close which are closest to the line. The Objector states that these properties are on the borderline where vibration levels may exceed the assessment criterion. The Objector quotes from the letter of 16 July 2010 that '*In these areas, specialist resilient trackforms will be used, if practicable, so that vibration from the new track at the nearest sensitive receptors will be no higher than the levels specified in BS6472 for 'a low probability of adverse comment'*'. The Objector states that her concern here is what will happen if it is not practicable to use resilient track forms.

3.8 There is no indication that such trackforms would not be practicable if required at Whimbrel Close. However, if trackforms are not practicable the levels of vibration are not expected to exceed a level at which “*adverse comments are possible*”.

4 Conclusion

4.1 This rebuttal proof responds comprehensively to the evidence presented by the Objector.

4.2 Eligibility for noise mitigation will be determined according to the procedures set out in the Noise and Vibration Mitigation Policy [CD/1.29]. A noise barrier will be installed as soon as possible after the commencement of the work and there is no indication that trackforms would not be practicable.

Appendix A

CRCL/R/OBJ26

Relevant Correspondence
between Chiltern Railways
and the Objector

OBJ/26

Bicester
Oxfordshire OX26

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

Dear Sir

RE: APPLICATION FOR THE CHILTERN RAILWAYS (BICESTER TO OXFORD IMPROVEMENTS) ORDER

I object to Chiltern Railways' proposals for the Bicester to Oxford line on the grounds that, if implemented, they will adversely affect my enjoyment of my property and considerably reduce its value. I was unaware of the proposals when I purchased the property in 2008.

My property is only about 15 metres from the existing railway line, and it is clear from the Environmental Statement that Whimbrel Close would be severely affected by ongoing operational noise following implementation of the Scheme – the noise impact of Phase 1 without mitigation is predicted as being “substantial”, that of Phase 2 as “high”. Even with a noise barrier, further mitigation would be required. I assume that my property is one of those identified as being likely to qualify for statutory noise insulation. One of the reasons I am so concerned about noise is that I am a nurse. At present, I do not have to do night shifts but, if this situation were to change, it would be absolutely critical for me to be able to sleep during the day.

I am also extremely concerned at the effect that the vast increase in the number of train movements would have in relation to air quality and vibration, bearing in mind how close the line is to my property, whatever the effect on the wider locality. I also feel the Scheme would severely restrict the peaceful enjoyment of my garden.

I have referred specifically to the ongoing operational effects of the Scheme, but, again with particular reference to the extremely close proximity of the line to my property, I feel that the disturbance caused during the construction phase would be very substantial.

If the Secretary of State approves Chiltern Railways' application, I consider that I should be entitled to the maximum level of protection available against noise and other environmental damage.

Moreover, the adverse effect on the value of my property would be such that I should be entitled to compensation under the terms of the Land Compensation Act 1973.

Yours faithfully

Beth A Forrow

Our Ref: PC/P3.2.3.245.1/EG3/001
Your Ref:

Bicester
Oxon
OX26

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

16th July 2010

Dear Mrs Forrow,

**Draft Chiltern Railways (Bicester to Oxford improvements) Order
Objection number 26**

We refer to your letter dated 13 February 2010 addressed to the Secretary of State for Transport. The following are Chiltern's responses to your points of objection:

1. The proposed increases rail traffic and its speed:

Whimbrel close has been considered in scheme planning, the results of which can be seen in the Environmental Statement (ES), which was submitted as part of Chiltern's application for powers to build the scheme. This must consider all environmental impacts expected. You can download a copy from www.chiltern-evergreen3.co.uk/. This document sets out where impacts are expected and sets out what Chiltern intends to do to mitigate these impacts. These mitigation methods are legally binding obligations on Chiltern, as they are set out.

As you have pointed out, Whimbrel close is listed in table 6.12 in ES vol2 as receiving a substantial impact from phase 1, and a high impact from phase 2. In table 6.14 it states that there are approximately 3 properties in Whimbrel close which are eligible for statutory noise mitigation.

Vibration levels have also been assessed to be a possible problem at the properties on Whimbrel Close that are closest to the line, the extract below is from ES vol 2 page 6-42:

Ardent Management Ltd
P.O Box 3050 . Wokingham
Berkshire . RG40 3YD
t . +44 (0)870 443 9100
f . +44 (0)870 443 9101
e . info@ardent-management.com

The estimated VDV levels of ground vibration are not expected to exceed the assessment criterion beyond approximately 10 m from the tracks. Receptors that are close to or within this distance from the tracks include Quadrangle House on St Peters Road, Kareol (the level crossing keeper's house southwest of Islip), Oddington Crossing house, 53 London Road Bicester, and the closest properties to the railway on Whimbrel Close, Bicester. In these areas, specialist resilient track forms will be used, if practicable, so that vibration from the new track at the nearest sensitive receptors will be no higher than the levels specified in BS 6472 for 'a low probability of adverse comment'.

In table 6.22 it states that at Whimbrel close noise mitigation will be provided in the form of noise barriers to protect the ground floor of the nearest properties as a result of Phase 1, if noise levels are expected to reach these levels following detailed design. Table 6.23 explains that a noise barrier will be needed for noise mitigation for Phase 2. The baseline noise levels at the properties closest to the railway in Whimbrel close showed 48dB in the day and 47dB in the night. As a result of phase 2 the levels will rise to 66dB in the day and 64dB at night. The trigger levels for statutory noise insulation are 66dB in the day and 61dB at night. Statutory noise insulation is in the form of secondary double glazing, or some other glazing method with the same performance characteristics. Mechanical ventilation is also added, to prevent noise through windows.

With regards to phase 2, on page 6-59 (ES Vol2) it discusses further mitigation methods and states:

Whimbrel Close – The upper floors of the closest properties are likely to qualify for statutory noise insulation which will reduce the internal effect of the 16 dB predicted impact.

As your property is one of the closest properties to the railway on Whimbrel Close, it is likely that it would be one of the properties eligible for statutory insulation, however until the detailed design phase, the exact properties are unknown. However it is extremely likely that the noise barriers will be implemented from phase 1. This will reduce the noise levels to an acceptable level.

The curve on the track near to Whimbrel close will also be designed with a suitable cant (tracks laid at a slight tilt) and track profile to minimise the risk of curve noise. Also in the unlikely event that wheel squeal does arise, operational measures will be taken to reduce it, including track profiling or wheel or rail lubrication.

2. Peaceful enjoyment of garden:

The noise barriers as mentioned above in part 1 are highly likely to be implemented along the backs of the properties in Whimbrel Close. The approximate locations of these barriers

can be seen in figure 6.1B of ES volume 3. These noise barriers are approximately 2 metres high from the level of the track and should therefore minimise the view of your garden and house from the train.

3. Air quality/Emissions

You also mention your concern over emission pollution. Modelling of the dispersion of emissions from rail and road traffic movements associated with Phase 2 of the Scheme (ie with more frequent train movements than in Phase 1) has indicated that pollutant concentrations at residential properties closest to the railway line will not cause significant air quality impacts. The total pollutant concentrations, including those from trains using the Scheme are likely to be within EU statutory guidelines, as implemented in UK law.

The Scheme is generally a positive development for improving air quality, as it provides a sustainable alternative to the car, particularly for commuting journeys into Oxford from surrounding areas.

4. The effects on the value and saleability of the property:

You will be compensated for any reduction in value of your property resulting from noise and vibration under the Compensation Code, as will be brought into effect by the Order when made. There is a free booklet produced by the Communities and Local Government website entitled 'Compulsory Purchase and Compensation Booklet 4: Compensation to Residential Owners and Occupiers' this explains how such compensation is determined.

The RICS also run a free Compulsory Purchase hotline which can be contacted on 0870 333 1600, they will put you in touch with a specialist for 30 minutes free advice.

We hope the above answers the questions that you raised in your objection, but if you wish to seek any further clarification, please do not hesitate to contact the undersigned.

Yours faithfully,



Paul Clarke
Associate director

cc C Baker ERM

28 October 2010

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Oxfordshire
OX26

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Facsimile +44 20 3206 5440
Email ian.gilder@erm.com

Your ref: OBJ/26

Dear Beth Farrow

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.

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
Head of Planning

For and on behalf of the Chiltern Railway Company Ltd

OBJ/26



Our Ref: PC/P3.noisepolicy/EG3/002
Your Ref:

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OX26 6XP

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E-mail – petergibbard@ardent-management.com

15th November 2010

Dear Miss Farrow,

**Draft Chiltern Railways (Bicester to Oxford improvements) Order
Objection number OBJ/26 – Beth Farrow**

I am writing further to the letter and accompanying noise report which was sent to you on the 28.10.2010. I hope that this document has helped to clear up the concerns which you had with regards to the project and the adverse noise and vibration effects which may be experienced.

If you feel that your concerns have been answered and you no longer wish to maintain your objection to the scheme, you can withdraw your objection by completing the enclosed form and sending it to the address specified.

If however you feel you have not had your concerns answered, please do not hesitate to get back to me with any further questions you may have.

Yours sincerely,

A handwritten signature in cursive script that reads "Peter Libbard".

**Peter Gibbard
Assistant Surveyor**

cc C Baker ERM
Attached Letter of withdrawal template.

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