

DEPARTMENT FOR TRANSPORT 2010
Transport and Works Act 1992
Transport and Works (Applications and Objections Procedure)
(England and Wales) Rules 2006
Chiltern Railways TWA Application 2010 to the Secretary of State

OBJECTION - STATEMENT OF CASE

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The proposed project cannot go ahead in its present form for the following reasons:

- 1) The proposer failed to address adequately the issues of environmental impact: vibration and noise.
- 2) The proposer failed to comply with the statutory consultation process, and the Freedom of Information Act 2000.

10 The present Chiltern Railways proposal for conversion to main line use of the existing single track, 30mph-speed limited Oxford to Bicester link must be viewed in historical context.

15 At the beginning of the 1960's Dr Beeching's report served as the basis for closing many railway lines. The Oxford to Bicester route was included in the 1964 British Railways Board's planned list of closures. The Yarnton loop was closed in 1966 and trains on the Oxford to Bicester line reduced to the occasional train in 1967. The intermediate stations were demolished or just abandoned and the A34 has been built on some of the track bed that belonged to the Yarnton Loop.

20 Planning permission was granted in 1965 for 33 Lakeside houses, including 35 Lakeside. It was sold to its first owner in 1968, a **year after** the Oxford to Bicester railway line was closed for passenger trains. At this time the entire railway network was contracting whilst the road network was expanding taking freight and passengers away from the trains.¹ At the time the Lakeside houses were built the expectation was that the railway line would close. Three out of the four bedrooms in the houses along
25 Lakeside were built at the back of the house facing the railway line.

The present proposal represents an instance of change from contraction or stability to expansionary trends. This expansion of the rail network and of the volume of traffic will result in profound and lasting impact on the residential dwellings along the track. Since this sets a precedent, it is essential to ensure that the measures put in
30 place provide adequate examples and are based on logical and equitable principles.

In the past in the UK, noise from railways has often been dealt on the basis of "we were here first" approach on the part of the rail operators. In the present case this logic must apply in the reverse sense: the houses were built at the time when the present reduced level of traffic was already in place; furthermore, it was expected to
35 reduce to nothing in due course. The onus is now on the proposer to ensure that the level of environmental impact (noise, vibration) *does not increase* compared with the present level. 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.*²

40 Presently, the *status quo* is maintained by limiting the train speed along the now continuous welded (since 2005) single track line. Together with the low frequency of passenger and freight trains and no night-time service this ensures acceptable living conditions for the residents of Lakeside. The proposers must be able to demonstrate their *readiness and ability* to maintain the present low levels of noise
45 and vibration through technical measures implemented at the time of construction.

¹ Since that time the railway network has remained at this substantially reduced size, with the new fast link from London to the Eurotunnel being the only significant new project.

² R. Watson, M. Sohail, "Reducing railway noise levels – the impact of forthcoming European legislation".

This is particularly important in view of the possibility of the track becoming used by the East-West Rail (EWR) consortium for heavy duty regular freight traffic.

It is fundamental for this public enquiry to address the issues of passenger and freight traffic as one. This is due to the fact that the technical measures implemented by Chiltern Railways will provide the infrastructure that will enable freight train operation. The position of CR management has been to abdicate all responsibility for the operation of freight traffic, since CR's interest is solely in running the passenger train service. This is disingenuous on CR's part: the works that are the subject of the present enquiry and that CR propose to undertake will *enable* the operation of freight service *without any further modification*. It is therefore appropriate and necessary for the impact of the freight service to be considered at this stage.

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. Indeed, there are documented instances of houses along Lakeside suffering structural damage and requiring underpinning. In fact, the only two houses along Lakeside that required this costly operation were the two lying closest to the track. This indicates that the problem is real and substantial, and requires being addressed at the proper technical level. Any increase in the level of noise and vibration is certain to increase the adverse impact on the existing structures, and cause other dwellings to require interventions that are both very costly and deeply disruptive to the residents.

Vibration, whether it is high or low amplitude and frequency, is disruptive both in terms of the structural damage that it causes, and as intermittent (but ongoing and persistent) nuisance to the occupants of the houses. Unlike noise, vibration cannot be shielded or abated by retro-fitting mitigation measures to the existing track. These issues must be addressed at the stage of track upgrading, at the level of ballast and vibration isolation installation.

The above concerns were brought to the attention of Chiltern Railways (CR) and Environmental Resource Management (ERM) companies. In my letter of 5 May 2010 I requested the disclosure of the following information:

1. Investigation of the nature of local soil, and the plans for laying down foundations that would ensure adequate isolation, to protect the adjacent properties from vibration and possible subsidence. We would like to know in detail what is proposed and planned for the isolation of rail from sleepers, sleepers from chairs and ballast, and ultimately from the underlying slab and this slab from the surrounding soil.
2. Investigation of the acoustic effects of the frequent passenger services, and those of the freight trains, including at night time, including with the increased (doubled) axle weight and container height.
3. Investigation of the measures to mitigate against noise propagation (over and above double-glazing, a measure that is both inadequate and inappropriate), including the mitigation of aerodynamic noise, diesel engine noise, wheel-rail contact noise, and carriage interaction noise. We would also like to know whether studies have been undertaken of the possibility of lowering the track and providing tunnel-style enclosure for the track.
4. We would like to see the results of the company's study of the effects of maximum speed on vibration and noise, and justification for attempting to increase it on this short stretch of track between two stations. We would like to

know the figure for the proposed line speed at Lakeside, and see the full reasoning and justification behind this.

- 5 5. We would like to see the detailed estimates of the noise and vibration levels before and after the line improvement project, and know which mitigation measures can be used to ensure that there is no increase.

10 The response from Mr Ian Gilder of ERM dated 14 June 2010 revealed that CR and ERM insight into these matters of grave concern to the residents was simply inadequate. Mr Gilder's letter did not provide satisfactory answers to any of the specific questions I posed. There were no graphs or formulas provided, nor any specific numbers. ERM and CR have thus failed to disclose the information requested.³ Instead, in a letter that is unnecessarily long and verbose, Mr Gilder merely outlines the basis and the practice the companies hope to use to deal with the environmental effects of the proposed scheme.

15 Both the basis and the practice the companies propose to use are not only unconvincing, but demonstrably flawed, lacking proper research and insight, driven throughout by cost-cutting, and displaying complete lack of consideration for the local residents.

20 Below I point several significant issues related to **vibration**.

1. Mr Gilder wrote (p.1):

"The approach we have 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..."

25 This statement reads as an evident and, frankly, appalling admission of the lack of knowledge, compounded by the lack of desire to acquire such. CR and ERM are unable to provide substantial evidence of specific research or understanding of the difficult soil conditions in North Oxford, and hide their ignorance behind references to "good practice". Their statements are replete with words "likely", "will, if necessary", etc. – all indicative of their present position of ignorance. In other words, for the purposes of planning and the subject of the TWA enquiry, the subject matter has not been prepared to any degree of detail. Therefore, the proposed scheme cannot go ahead without further preparatory work on the part of CR and ERM.

35 2. Mr Gilder wrote (p.1):

"At this stage in the design, detailed ground investigations have not yet been undertaken."

40 This is an indication of poor management and planning. The scope of effort and investment required to deal with the problems in the appropriate manner must be identified.

3. Mr Gilder wrote (p.2):

45 *"These [vibration mitigation measures] will then be installed to ensure that, wherever practicable, everywhere along the railway, vibration felt inside residential properties is kept to below a very strict limit..."*

I believe that the TWA enquiry is the necessary and appropriate stage for engaging in a careful discussion and definition of the term "*wherever practicable*".

³ Thus failing to comply with the regulations on public consultation and the Freedom of Information Act 2000.

Unwrapped and decoded, in the present case, it means, in Chiltern Railways' book, "wherever consistent with the *a priori* decisions on investment into the relevant measures". The letter from Mr Gilder of ERM reveals a complete lack of preparation and analysis of how much this will have to be in practice. In other words, the
5 consideration of "practicability" is driven purely by the financial considerations, not by practical necessities of impact on nearby properties. Put even more simply, Chiltern's "practicality" is driven by greed.

Within the same paragraph, while Mr Gilder discusses the vibration limits, he contradicts his own logic by saying: "*Even at well above this limit, no structural or
10 cosmetic damage to property will occur.*" This is simply ridiculous: firstly, there is *already* evidence of damage – but lack of evidence of Chiltern's investigation into this matter. Secondly, this strict limit was determined to ensure long term safety and to avoid damage to properties. This last statement reveals the cavalier attitude of Chiltern and ERM: they are content to ignore such limits, despite the fact that they
15 have been formulated through care and deliberation of many experts over considerable time.

The discussion of the acoustic effects presented by CR and ERM was unacceptably loose, and provided no substantial answers to my questions. The mitigation measures
20 discussed by CR and ERM are inadequate at reducing the negative health impact of the intermittent noise of faster trains. The measures and guidelines are used by the companies in an arbitrary and confusing fashion.

It is apparent that Chiltern and ERM are keen to twist the interpretation of various regulations in order to come up with justification with minimal investment in
25 proper noise-reducing measures along the line. This simply will not do: it is not a question of finding the cheapest way to meet the regulations in the formal sense; these constructs are paper-thin. The proposers must engage in a meaningful and careful analysis of the real effects through discussion with the residents concerned, to ensure that the real impact of the scheme is to keep the noise at the present level, but better
30 still to decrease it.

The current plans will lead to a substantial and lasting increase in the noise impact on the residents. The noise will become more frequent, abrupt and intrusive than at present, and will occur more often at night. This will cause profound unhappiness and detriment to the health of residents of Lakeside.

35 On the basis of my own investigation of the matters of noise and vibration, I conclude that the only acceptable way of dealing with the looming problem will be by the combination of two measures:

- (a) by lowering the track level, to reduce the noise and vibration impact; and
- (b) by placing a tunnel over the length of the track between Wolvercote tunnel
40 and North Oxford golf course

Summary and recommendation

In summary, the proposers failed to provide evidence that they possess the necessary
45 insight and have developed a solid technical basis for their proposal. It is abundantly clear that every opportunity has been taken to (mis)interpret the regulations in order to reduce investment. This should be seen in context: ultimately this stretch of track will be handed over to Network Rail, so that the responsibility for providing mitigating solutions will once again reside with the public. It seems wrong, both morally and
50 economically, at this enquiry to allow a private company to get away with minimal investment, maximum profit, and misery to local residents, as a side effect.

5 An alternative is for the present enquiry to set an example for protecting the interests of the residents, whilst ensuring broader public benefit. This should be done by imposing the **obligation on the company to put in place engineering solutions** to reduce *vibration* (vibration isolating foundations, lowered track) and *noise* (tunnel over the track). The measures will ensure the avoidance of vibration-induced nuisance to the residents and structural damage to their properties, and eliminate the increase in the noise levels perceived within houses and gardens along Lakeside.

10 A company that wishes to take on a large scale project that has an extensive and profound impact on public health and well-being, must be held accountable for their planning – or lack thereof. If such company displays inability to put proper analyses in place, nor disclose their results, their application ought to be turned down, or postponed until such time when adequate, scientifically based and well-reasoned designs are made available.

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