From:	Alan and Pamela Walton
To:	A303SparkfordtoIlchester@pins.gsi.gov.uk
Subject:	Long Hazel Park Sparkford reference 20014098
Date:	30 April 2019 12:19:56
Attachments:	Final submissions A303.odt

Please find attached Comments, Responses and Submissions on behalf of Long Hazel Park.

Kind regards
Alan and Pamela Walton

The A303 Sparkford to Ilchester Dualling Project case reference TR0l0036

Long Hazel Park reference 20014098

Written evidence comments and further submissions on behalf of Long Hazel Park arising out of draft SoCG, Applicants Answers to Planning Inspectorates specific Questions relating to traffic noise issues

Mr Alan Walton and Mrs Pamela Walton for and on behalf of Long Hazel Park and Long Hazel Lodges Limited will say:-

1. We have now been able to review the Applicants answers to the Planning Inspectorate's various questions abut noise mitigation for Long Hazel Park in particular.

2. The Applicant is still intending to make no plans whatsoever to mitigate traffic noise at Long Hazel Park despite the clear indication that traffic noise will increase during construction and after completion of the scheme. The WHO advice and potential damage to health are side lined along with Government planning guidelines.

Research on the internet shows that:-

Evidence from studies increasingly suggests that noise pollution can have a detrimental impact on modern living, from house prices to physical health and wellbeing. https://www.ncbi.nlm.nih.gov/pubmed/28575405 The impact of noise is often felt most in busy urban areas or industrial sites, however, there's a solution to limiting noise and the damage it can cause to physical and mental wellbeing.

Noise in numbers – according to Dr Yutong Samuel Cai, an epidemiologist at Imperial College London, (www.imperial.ac.uk/news/179722/noise-from-busy-roads-might-increase). There is "consistent evidence" that sustained noise from a busy road can affect human health more dramatically than being exposed to exhaust fumes, Cai found that long-term exposure to traffic noise can modify blood biochemestry and even lead to heart attacks. Exhaust fumes, Cai found that long-term exposure to traffic noise can modify blood while another study, from Barts and the London School of Medicine, linked noise pollution and type 2 diabetes. Unexpected, irregular noise can also have far-reaching effects. Construction sites, with heavy machinery and HGV traffic, or busy public areas such as 24-hour supermarkets or pubs and bars can product disruptive sounds during unsociable hours. This can affect local residents' sleep patterns, making it, at best, harder to relax and unwind or, at worst, having a serious impact on health and wellbeing.

How much is too much? Noise is a pollution which studies have shown can cause serious harm; much like any other pollution, it's essential to limit exposure and minimise the impact it can have on peoples lives. The World Health Organisation (WHO) recommends around 30-40 decibles (dB) for good quality sleeping conditions at night, and similar during the day. Despite this, over 125 million Europeans regularly experience noise levels about 55dB. The European Environment Agency blames 10,000 premature deaths in Europe each year on noise, citing the most pervasive source as road-traffic noise.

https://www.transportenvironment.org/sites/te/files/media/2008-02_traffic_noise_ce_delft_report.pdf

Preface

Millions of people in Europe are affected by transport noise. Transport noise annoys people, causes

stress and illness and may sometimes even have a fatal impact. As a result, noise is very costly to society.

There are numerous cheap and relatively easy ways to reduce transport noise significantly. First of all, noise should be taken as seriously as other forms of pollution, as it is similarly damaging to human health. This year, 2007, is an important one for the future of noise policy. The European Commission is presenting a proposal for tightening car tyre noise emission limits, and in June 2007 the first noise maps of large agglomerations, main roads and railways were to be submitted to the Commission under the terms of the Environmental noise directive.

This reports describes the health effects of rail and road transport noise and presents a number of recommendations as to how to address them.

We would like to kindly thank the people who reviewed this report for their contributions. The comments of Rokho Kim of the WHO and Tor Kihlman of the Chalmers Institute of Technology were especially helpful in improving the overall quality of the report. We also thank Nigel Harle for his careful editing of the English.

Eelco den Boer Arno Schroten

Summary

The main conclusions of this report are as follows:

Health effects and social costs • Traffic noise has a variety of adverse impacts on human health. Community noise, including traffic noise, is already recognised as a serious public health problem by the World Health Organization, WHO. • Of all the adverse effects of traffic noise the most widespread is simply annoyance. • There is also substantial evidence for traffic noise disturbing sleep patterns, affecting cognitive functioning (especially in children) and contributing to certain cardiovascular diseases. For raised blood pressure, the evidence is increasing. For mental illness, however, the evidence is still only limited. • The health effects of noise are not distributed uniformly across society, with vulnerable groups like children, the elderly, the sick and the poor suffering most. • In 2000, more than 44% of the EU251 population (about 210 million people) were regularly exposed to over 55 dB of road traffic noise, a level potentially dangerous to health. In addition, 35 million people in the EU25 (about 7%) are exposed to rail traffic noise above 55 dB. Millions of people indeed experience health effects due to traffic noise. For example, about 57 million people are annoyed by road traffic noise, 42% of them seriously. • A preliminary analysis shows that each year over 245,000 people in the EU25 are affected by cardiovascular diseases that can be traced to traffic noise. About 20% of these people (almost 50,000) suffer a lethal heart attack, thereby dying prematurely. • The annual health loss due to traffic noise increased between 1980 and 2000 and is expected to increase up to 2020. In contrast, traffic safety has improved, following implementation of a variety of policy measures. • At a conservative estimate, the social costs of traffic noise in the EU222 amount to at least 40 billion per year (0.4% of total GDP). The bulk of these costs (about 90%) are caused by passenger cars and lorries.

Noise reduction options • If noise-related problems are to be alleviated, they must be the subject of greater political focus. Vehicle noise emission limits have not been technology-forcing since their introduction and were last tightened in 1995. This means these limits have not been updated for twelve years, in stark contrast to vehicle air pollution emission standards, which have been tightened three times over the same period. • Consequently, there has been no reduction in community exposure to noise. This is due to the lax limits in the EU Motor vehicle sound emission directive 1 EU25 refers to EU27 except Cyprus and Malta. 2 EU22 refers to EU27 except Cyprus, Estonia, Latvia, Lithuania and Malta.

and the Tyre/road directive, the fact that changes in test conditions have in practice led to even weaker limits, and increased traffic volumes. • There is plenty of scope for reducing ambient noise levels by

at least 3-4 dB(A) in the short term using currently available technology. Beyond 2012, year-on-year improvement targets (x dB(A) every y years) should be introduced, outlined well in advance to give industry time to adapt. • In the case of both road and rail traffic, there are already vehicles/rolling stock available that are well within current noise standards. Besides the vehicles themselves, examples of silent tyres/wheels and road pavements/tracks show also room for noise reduction. At noise 'hotspots' additional, local measures can be implemented. • The most cost-effective measures are those addressing the noise at-source. This includes noise from the engine, exhaust, mechanical systems and contact between tyres and road, or wheels and track. The associated costs are generally limited, for vehicles and tyres at least. There are signs that use of composite brake blocks on rail wagons also comes at a modest cost. • Although an optimal noise control regime will always be a mix of local and atsource measures, the Commission should take responsibility for ensuring that the noise emissions of cars, tyres and railways are reduced significantly. These are the most cost-effective measures and their impact will be felt across Europe. • When it comes to tightening noise standards and improving test procedures, prolonged discussions and political procedures are costing Europe dearly. If the EU does not come up with better policies soon, local measures will need to be taken, which are considerably more expensive than measures taken across the EU

3. The latest draft SoCG does indicate a section of the new carriageway will be of the traffic noise reduction type for a length of 500 metres from the roundabout. This needs clarification as to what lanes will be surfaced and from what points on the plans will the surface be laid. Will it fall short of the boundary with Long Hazel Park for example?

4. In relation to the proposed elevated section of the Scheme at Camel Hill and the issues raised since the draft SoCG was last modified there is an unresolved issue of prevailing winds from the West blowing traffic noise into Long Hazel Park. The effects of this is very much played down by the Applicant who does not seem to have a lot to go on. Will this be addressed in the SoCG? What kind of noise control barriers will be fitted at the elevated section and what is their predicted level of noise reduction in terms of decibels should this be the case? There will no longer be a scenario where traffic on the A303 will slow or stop at the existing roundabout and at peak times and slowly creep up Camel Hill to filter into the single carriageway as it does now at peak times. The opposite will prevail namely 4 lanes of traffic all moving at about 70 mph plus traffic pouring off to the slip roads at the same time with the noise from all this being in the region of 65 to 70 decibels (see text below) as opposed to 39 to 47 decibels when traffic is slow moving or stopped. Such traffic noise will be blown on the wind to carry it into Sparkford Village and Long Hazel Park. We do experience winds of 50 mph and higher which was indeed the case this weekend 26/27 April 2019 due to storm Hannah which was blowing traffic noise to us from the West. RNAS weather station Yeovil confirms that Sparkford experiences prevailing wind from the South West.

5. In the Answers to the Learned Planning Inspectors Questions about traffic noise levels for Long Hazel Park the Applicant in particular replied "These predictions do not include the noise attenuation produced by noise barriers around the Park or the acoustic shadowing that would be provided by the lodges when built." The Applicant indicates that the existing noise mitigation at Long Hazel Park is inadequate to combat the traffic noise.

6. We request the Learned Planning Inspectors to direct the Applicant to:-

(a) disclose what the results would be if a typical approved and widely used traffic noise mitigation barrier was provided along the northern boundary of Long Hazel Park and possibly the boundary with Long Hazel Farm and by how much would this reduce traffic noise entering Long Hazel Park in terms of percentage and decibels.

(b) What type and height of traffic barrier would be suitable. This is asked for because the Applicant continues to argue that noise levels will be insignificant without doing anything so what would be the

result if something was done?
An extract from a website of a leading noise barrier manufacturer “the soundproof windows company” indicates:-

https://thesoundproofwindows.co.uk/noise-pollution-solutions/road-traffic-noise-reduction/

MOTORBIKES

Motorbike exhausts have been restricted to **80 decibels** in the UK, however this is still an extreme level, especially if it’s your neighbour revving their engine at 6 in the morning.
The tonal components in motorcycle exhaust noise were observed at around 50–80 Hz and 125–200 Hz. Conversely 2 stroke engines have tonal peaks in the 160 Hz, 315 Hz and 500 Hz third octave bands, reflecting the characteristic higher-frequency sound of a moped engine.

SIRENS

If you live near a police station, hospital or fire station you will certainly be suffering from the sounds of sirens which go off at all times of the day. These tend to peak at around **120 decibels**, which, to put into perspective, is 32 times louder than a vacuum cleaner.
In terms of frequency, emergency sirens tend to operate between 1kHz-4kHz, often sweeping between these frequencies.

Note Long Hazel Park experiences sirens on the A303 and A359 every day and night.

CARS & MOTORWAYS

The loudness of a car will depend upon your proximity to the vehicle, and how fast the car is travelling. The following is a breakdown of noise pollution from cars at different speeds:

- At idle: **39 – 47dB**
- At 55 mph: **59 – 69dB**
- At 65 mph: **65 – 73dB**
- At 85 mph: **65 – 84dB**

Most frequency spectra of exterior tyre/road noise display a prominent peak in the range of 700-1300 Hz.

When considering Acoustic Sound Barriers we have extracted information from the website of Proctor Contracts:-

https://www.proctercontracts.co.uk/product/acoustic-fencing/Home > Products > **Acoustic Fencing**

Acoustic sound barriers

Effective solution to excessive and unwanted noise

Acoustic fencing and barriers provide up to 32

Db attenuation and is an effective solution to excessive and unwanted noise for residential, commercial, industrial, distribution facilities, sports venues and railway and highway applications.

The panels we use are specially designed to satisfy stringent highway performance standards. With up to 30 Db attenuation. Tested and compliant with BS EN 1794-1 and BS EN 1794-2.

Procter Contracts provide acoustic fencing in two material specifications: timber and recycled high strength glass reinforced polymers (Pro-acoustic). Both material specifications can be provided in either reflective or absorptive specifications.

https://www.noiseairconsultants.co.uk

The Steel Modular Paneled System

Used for both indoor and outdoor applications this flexible insulated panel design provides a cost effective noise barrier. The rigid modular construction is widely used for many applications including:

- Noise barriers – traffic, railway and aircraft noise
- Industrial plant and machinery – noise screens or semi enclosures
- Acoustic screening for offices and commercial buildings
- Parameter acoustic screens – car parks, traffic depots etc
- Demolition and building sites
- Sports venues

The panels are self supporting up to a height of 6 meters and can often be assembled without the need for additional structural framework. We supply a range of panels differing in many respects but all offer lab tested noise reduction properties. A standard panel (one side perforated) giving typical airborne sound insulation figures as follows:

- 50mm thick – 34dB
- 80mm thick – 36dB
- 100mm thick – 37dB

- These products are readily available and affordable for the Applicant to employ them is reducing traffic noise levels from the A303 especially for the benefit of Sparkford Village High Street and Long Hazel Park in particular.

7. This Easter Bank Holiday 2019 traffic volumes were exceptionally high around Sparkford and the noise was much higher as a consequence. Some of our guests who came to stay at Long Hazel park left early as a direct result of excessive traffic noise. One party only stayed for four hours after erecting

their tent and then packed up. Many guests made various adverse comments about trafffic noise and a negative internet review followed. Two viewings for residential lodge sales quickly evaporated due to comments on traffic noise.

8. As for the new A303 Scheme aiding the local economy we strongly beg to differ. Firstly it will accelerate and filter most of the passing trade out of the District. The proposed layout at Hazlegrove roundabout will only serve to cut passing trade to local businesses especially from motorists coming from the West towards the East. This is because they will no longer be able to access local services unless they exit the A303 eastbound carriageway at the A359 slip road and return about a mile or so back into the village. As for motorists travelling from East to West they may find the proposed new layout which will send them into a cul de sac on the old road at Camel Hill a put off. We do strongly support our local bakery in their submissions as well as Mateos Diner and the Shell Garage which would together be spared with the provision of a parallel road and we wholly support the submissions made by Mr Bryan G Norman Bsc.

9. We cannot believe that the Applicant evades the provision of at least some sort of lighting in the underpass tunnel at Camel Hill linking Hazlegrove School on alleged financial grounds. In the winter months especially it gets dark around 4pm and daylight returns light around 8am. There will be users in the tunnel when it is dark. Has the Applicant considered a solar system with back up battery and LED lighting? This could be provided for a reasonable cost with very little aftercare and could be monitored remotely. Security and safety of users should come first.

10. In relation to traffic calming and a pedestrian crossing for Sparkford High Street it is predicted that up to 7,500 vehicles per day will use this short section of road. The immediate population on either side of the Sparkford High Street is expected to increase by up to 500 adults and children once all the local developments are completed. Many of these residents will need to cross the road to catch buses or access the footpaths or the shop and service station as well as the Inn and play ground. Surely it cannot be right that the Applicant still argues that no change is acceptable in the light of these predicted massive increased levels of users.

As a consequence of the above we hereby withdraw our support to the layout at Hazlegrove Roundabout and our hitherto support for the scheme on the grounds that we are not satisfied that the traffic noise issues and its effects on health are going to be addressed along with traffic calming at Sparkford High Street resulting in local businesses being harmed.

We submit that the Applicant is wrongly maintaining its stance on the assumption that the noise levels are below or will remain below the Significant Observed Effect Level and are insignificant whereas in reality they are not likely to be so.

11. On the balance of probabilities we submit that there will always be a margin of error in such cases which raises a doubt and that doubt in accordance with the rules of natural justice ought to be balanced in favour of those adversly affected. Once again we ask the Planning Inspectorate to rule that noise mitigation for Long Hazel Park and Sparkford Village as well as traffic calming for Sparkford High Street and the Hazlegrove access tunnel lighting should be required as a condition of permitting the development.

Dated 26 April 2019

Alan R Walton
Retired Barrister-at-Law and non-practising Solicitor

Partner Long Hazel Park and Company Director and Company Secretary Long Hazel Lodges Limited