



## **PIRBRIGHT VILLAGE SAFETY SCHEME**

### **SURREY COUNTY COUNCIL LOCAL COMMITTEE (GUILDFORD)**

**20<sup>th</sup> OCTOBER 2005**

#### **KEY ISSUE**

This report seeks a decision on the way forward following concern expressed regarding noise and vibration allegedly as a result of road humps installed as part of the Pirbright Village Safety Scheme.

#### **SUMMARY**

The report sets out the problems being experienced and the noise and vibration studies and a survey of the property that have been undertaken to discover their cause. It puts forward here options which may at least partly improve the situation, including removal of road humps, their replacement with speed cushions and a ban on heavy goods vehicles exceeding 7.5 tonnes.

#### **Report by**

LOCAL TRANSPORTATION DIRECTOR

#### **GUILDFORD B.C. WARD(S)**

PIRBRIGHT

#### **Surrey Atlas Ref.**

Pages 87 F4-F5, 88 A4-A5

#### **COUNTY ELECTORAL DIVISION(S)**

WORPLESDON

**OFFICER RECOMMENDATIONS**

The Committee is asked to agree:

***Either:***

- (i) that the suggested 7.5 tonne weight restriction be approved subject to the normal consultation procedures.
- (ii) that subject to the above the intention of the County Council to make the necessary Weight Restriction Order under Sections 1 and 2 of the Road Traffic Regulation Act 1984 as set out in this report be advertised and, if no objections are received, the orders be made.
- (iii) that following consideration and, where possible, resolution of any objections or representations, the Orders be made.
- (iv) that one or more of the schemes shown in the table following paragraph 20 be deferred until 2006/07 at the earliest (the Committee to decide which scheme(s)).

***Or:***

- (v) that no further action be taken and the complainants be informed accordingly.

**INTRODUCTION AND BACKGROUND**

- 1 The Pirbright Village Safety scheme was approved by the Committee on 18 September 2003 following extensive public consultation involving the Parish Council.
- 2 The package of measures implemented includes:
  - Traffic calming (road humps) on the minor roads around The Green
  - A 20mph zone in School Lane around Pirbright County Primary School, using traffic calming (chicanes) to control vehicle speeds
  - Pedestrian refuges and crossing points on the A324 to aid pedestrian movement and reduce vehicle speeds
  - Village gateway features, at the start of the 30mph speed limits entering the village
  - Street lighting, in association with the traffic calming measures and pedestrian crossing facilities
  - Enhancement of local signing and road markings as required.

- 3 The objective of the scheme was to enhance road safety in the village by addressing vehicle speeds and improving conditions for pedestrians, particularly in the vicinity of the school. Over the three years (April 2000 to March 2003) there were 21 Personal Injury Accidents.
- 4 After some minor initial teething troubles which have been satisfactorily resolved, the scheme has been generally welcomed, and retains the support of the Parish Council.

### THE ALLEGED PROBLEM

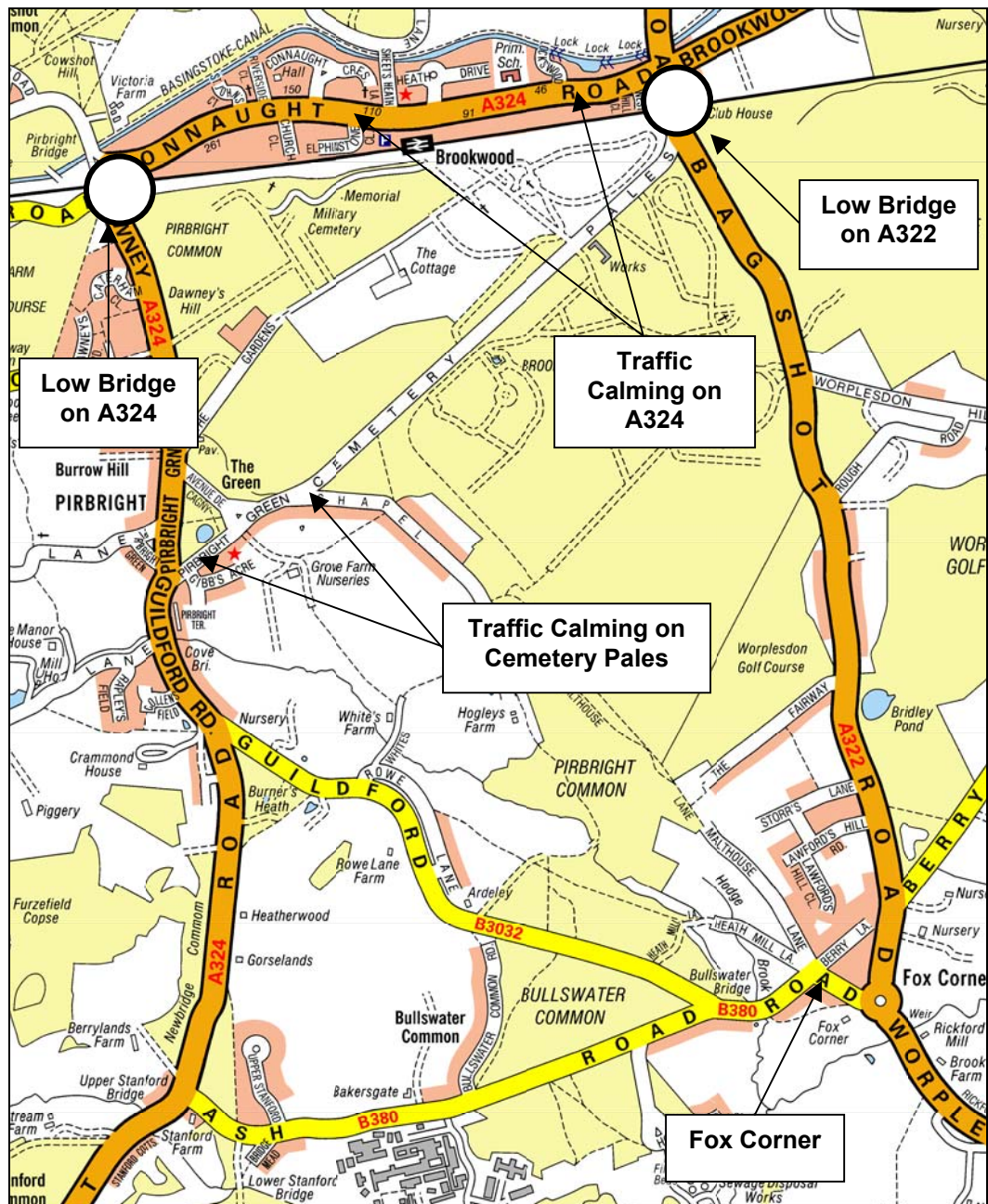
- 5 One issue remains to be resolved. Following installation of 5 road humps in Pirbright Green and Cemetery Pales, one local resident whose property lies between humps 3 and 4 has complained of noise and vibration resulting in cracking of plaster and loss of sleep. Two other residents of the road have also expressed concern, but have not suggested that plaster cracking or sleep loss is a problem for them. The Parish Council Chairman has also made representations on behalf of the complainants.
- 6 Officers and/or the local Division / Ward Member have met with the principal complainant on a number of occasions to discuss her concerns and seek a satisfactory solution. As a result the following actions have been taken:
- 7 **The heights of the humps have been checked** to ensure that they lie within acceptable tolerances of the design. This revealed some deviation, which in the view of officers was not excessive. In view of the sensitivity of the matter, however, SCC's constructor was instructed to ensure that the humps did not exceed the design height. At the same time the ramps on either side of these humps were extended to reduce their gradient and therefore the impact of vehicles and the vibration and noise caused. Subsequent vibration surveys show the level of vibration has reduced and that they therefore remain substantially below the threshold level for property damage. There are many roads humps in Guildford and elsewhere in Surrey which are higher and/or have steeper ramps and where there is no reported problem of noise or vibration.
- 8 **Noise and vibration surveys have been carried out** on several occasions to determine whether these are excessive and / or likely to be the cause of the damage observed. These surveys were carried out before and after the modifications, during the day and on one occasion overnight. The relevant Transport Research Laboratory report gives guidance figures as follows:
- |   |           |
|---|-----------|
| Threshold of perception                   | 2.0 mm/s  |
| Virtually no risk of architectural damage | 2.5 mm/s  |
| Risk of architectural damage              | 5.0 mm/s  |
| Structural damage risk                    | 10.0 mm/s |
- 9 Most vibration events were in the region of 0.2 mm/s, with a small number as high as 0.3 mm/s. Arrangements were made for an SCC constructor's lorry to drive over the humps at speed. This achieved a reading of 0.8 mm/s. The worst 'unstaged' readings were from a Post Office lorry giving 0.5 mm/s over hump 4 followed by 0.8 mm/s over hump 3.

- 10 Further surveys carried out after the humps were reduced in height showed the recorded vibrations, if they registered at all, to be in the 0.1 to 0.2 mm/s range. The highest reading was 0.4 mm/s, compared with 0.8 mm/s prior to the adjustments. Even allowing for the occasional significantly worse event there is no possibility of vibrations occurring due to road traffic that could significantly damage the property.
- 11 **Mouchel Parkman, the County Council's property consultants, were commissioned to carry out a survey of the property** and to report on any defects and their possible causes. Their report highlights numerous hairline cracks in several rooms which are typical for house construction. These cracks can be caused by temperature movement, ageing of materials, de-bonding, ceiling movement, sagging or vibration. None of these cracks appeared to be of any structural significance and they require no structural intervention.
- 12 One bedroom had two very noticeable cracks present which appear to be new based on the fact that they cut sharply through recent paintwork. These were thought to represent some differential movement between the extension and the original house. It is possible also that vibration being amplified between the original house and the extension is a contributory factor. At present the cracks are not structurally significant.
- 13 Mouchel Parkman concluded by recommending remedial repair and re-decoration (filler, and paint or wallpaper) to the cracks. They also recommend that monitoring of the cracks to the master bedroom should be undertaken over a period covering all the four major seasons.

## OPTIONS FOR CONSIDERATION

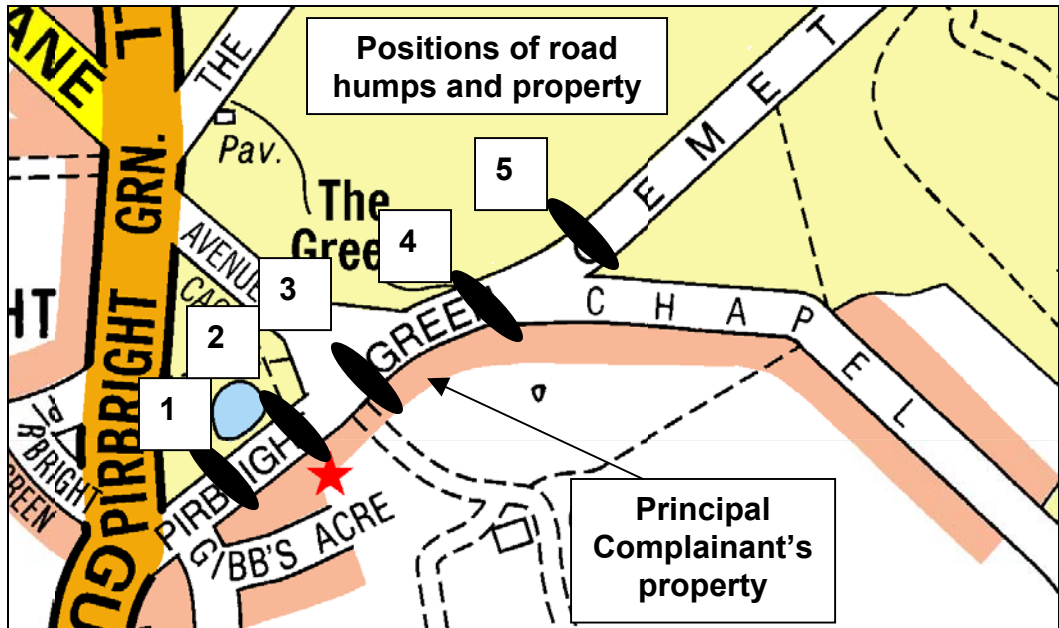
- 14 Officers and Members met again with the principal complainant on 27 September 2005. She remains supportive of the objectives of the Village Safety Scheme including accident and speed reduction, but is very concerned at the noise and vibration. She reports that she cannot sleep in the main bedroom of the property, and that some residents are still finding that these problems are causing a significant and ongoing nuisance. She has requested that further action be taken. Particular suggestions put forward, together with officer comments on each, are as follows:
- 15 **A 7.5 tonne Heavy Goods Vehicle ban.** This is a possibility. It would need consideration against HGV routes in the area as a whole. Cemetery Pales is a C road in a conservation area. Other A or B roads would be preferable routes for HGVs. However, as shown on the map below, the two local principal roads (A322 and A324) are both limited by the presence of low bridges. Any additional restriction on HGVs' use of Cemetery Pales may therefore displace HGVs to other, less suitable routes. One such alternative route is through Fox Corner, itself the subject of a petition to the Committee on 3 March 2005. The cost of the officer time, advertising and signage would be some £10,000. There is a risk of low enforcement and therefore of non-compliance. There would be a need to consult with the Parish Council, Surrey Police, the Freight Transport industry and others and advertisement of the proposed Traffic Regulation Order and dealing with any objections received. The Freight Transport Association is

likely to object to the proposal. The likely timescale for the above would mean that the ban could not be in force before March 2006. The complainant is keen to see action taken sooner than this.



- 16 **Complete removal of one or both of road humps 3 and 4.** This is unlikely to be possible since it would increase the distance between humps 2 and 5 to some 260 metres, over double the permitted distance between adjacent humps. This could be resolved by also removing hump 5 and relocating the Vehicle Activated Sign which is the speed-reducing feature on the approach to the village. The principal complainant has indicated that she would be willing to pay for the cost, at least of the temporary removal of these humps pending a decision on the way forward. This would mean that around a dozen properties would no longer benefit from the speed reduction achieved (excluding many others on Chapel Lane), and leaving just two humps would weaken the speed-reducing effect of the village safety scheme as a whole. The proposed

changes to the traffic calming would require advertisement. The cost of this proposal would be some £20 - 25,000.



- 17 **Replacement of one or two of the road humps with speed cushions.** This is possible, but could be confusing to drivers who would face a mixture of cushions and humps on the same route. There are, however, local examples (Connaught Road) of successful use of mixed traffic calming measures. Larger vehicles would be able to straddle the cushions and would not need to slow down, so the speed-reducing effect of the safety scheme would be reduced. If one of these faster-moving HGVs were to impact a speed cushion, it is possible that the vibration transmitted could be greater than those currently being experienced. Once again, this proposal would require advertisement, and is estimated to cost some £25 - 30,000.

## FINANCIAL IMPLICATIONS

- 18 Members should be aware that the Minor Improvements budget is under great pressure due to overspends last year, rapidly increasing costs and reduced government funding. The Committee agreed at its meeting in July 2005 to over-allocate the funds available this year as shown in the table below. As a result officers will arrange for a number of schemes to commence late in the year in such a way that their costs will fall partly into 2005/06 and partly in 2006/07.

**ITEM 12**

	<b>LTP £ 000</b>	<b>Local Allocation £ 000</b>
<u>Expenditure:</u>		
Schemes carried forward from 2004/05	660	42
New schemes proposed for 2005/06	472	53
Total Expenditure	1132	95
<u>Funding Available:</u>		
Carried forward from 2004/05 (deficit)	93	(19)
New funding for 2005/06	620	100
Total Funding		
(Deficit)	(419)	(14)

19 It is common for minor adjustments to be required to highway proposals as they are implemented, and officers build contingency allowances into estimates to allow for this. The proposals in this report go beyond 'normal minor adjustments' and would add significant additional costs to the programme. As a result it will be necessary to further delay commencement of one or more of the schemes in the programme to allow for this.

20 New schemes agreed for the 2005/06 programme include the following:

<b>Scheme Description &amp; Location</b>	<b>LTP £ 000</b>	<b>Local Allocation £ 000</b>	
Bus Stop Accessibility	20		
SRS Low cost initiatives	40		
Guildford Town Centre Accessibility Study	25		
Vehicle Activated signs	25		<b>U</b>
Train Stations accessibility	22		
Speed Management	40		
Seale & Sands Village Safety Scheme feasibility and construction	60	10	
A320 Woking Road, Guildford j/w Fir Tree Path feasibility		8	
A25 Shere Rd, Newlands Corner, Shere – feasibility		10	
Newark Lane j/w Wentworth Close, Ripley – Pedestrian Crossing	67		
Pirbright Village Safety Scheme Phase 2 – feasibility & construction	50		<b>U</b>
Normandy Village - safety scheme - feasibility & construction	123	15	<b>U</b>
West Clandon Village Safety Scheme –feasibility		10	<b>U</b>
<b>TOTAL</b>	<b>472</b>	<b>53</b>	

'U' denotes uncommitted schemes

- 21 If Members are minded to agree that further adjustments be carried out in Cemetery Pales, it is recommended that one of the uncommitted schemes (marked with a 'U') in the above list be deferred, i.e. not commenced until 2006/07 at the earliest. The deferral of any scheme will be unpopular, particularly if one village were to lose its scheme to benefit Pirbright. Members may wish to consider whether the deferred scheme should be Phase 2 of the Pirbright Village Safety Scheme in order that both the costs and benefits of any such decision should affect the same community.

### **SUSTAINABLE DEVELOPMENT IMPLICATIONS**

- 22 This report provides a clear illustration of the difficulty of achieving sustainable transport solutions. On the one hand are the difficulties being experienced by a small group of residents, and one resident in particular, whose ability to lead a fulfilled, healthy life is allegedly being compromised by actions taken by the County Council. On the other is the possible reduction in the effectiveness of measures designed to improve road safety and improve the village environment, together with the financial consequences of deciding to devote more resources to one project at the expense of others.

### **CONSULTATIONS**

- 23 This report has not been the subject of any consultation, other than with the principal complainant and local division / ward Member. The measures implemented as part of the Pirbright Village Safety Scheme, however, were the subject of extensive consultation, and the measures have generally been welcomed. Care should therefore be taken in deciding what action should be taken to ensure that the positive aspects of the scheme are not lost. Formal consultation will be required whichever option (other than doing nothing) is chosen.

### **CONCLUSIONS AND REASONS FOR RECOMMENDATIONS**

- 24 Following extensive investigation, it is clear that the appropriate design standards have been adhered to, and that measured vibration levels are substantially below levels which would normally cause concern. The Village Safety Scheme as a whole is popular and enjoys local support. Despite this, there is clear local concern at the situation.
- 25 The options which have been put forward to improve the situation are all potentially expensive and have disadvantages in terms of speed reduction and safety in the village. Equally there is no guarantee that any of these options will be wholly successful in satisfying the complainants.
- 26 It is the view of officers that removing or modifying any of the road humps, or their replacement with cushions would therefore be ill-advised. The proposed 7.5 tonne HGV ban does however have merits, although no guarantee of success. Members are therefore invited to resolve either to implement such a ban, or to resolve that no further action be taken.



27 In the event that the HGV ban is approved and bearing in mind the financial position of the minor improvement programme as a whole, Members are further invited to agree that one or more of the schemes in the programme be deferred and to identify which scheme(s) should be so deferred, taking account of the officer comments in paragraph 21.

---

**LEAD OFFICER:** DEREK LAKE  
LOCAL TRANSPORTATION DIRECTOR

**TELEPHONE NUMBER:** 01483 517501

**BACKGROUND PAPERS:** Mouchel Parkman report  
Emails from SCC's Noise Engineer

---