

# **LOWER ROAD, BOOKHAM – PROPOSED PEDESTRIAN CROSSING FACILITIES**

**MOLE VALLEY LOCAL COMMITTEE  
23 JULY 2003**

## **KEY ISSUE:**

Members are asked to approve the statutory advertisement and consultation of a signal controlled crossing in Lower Road, Bookham, between St Nicholas Avenue and Eastwick Road.

## **SUMMARY:**

This report considers several options for the provision of pedestrian crossing facilities in Lower Road, between St Nicholas Avenue and Eastwick Road, in the vicinity of the Eastwick Infant and Junior schools. The agreement of Members to the advertisement and consultation of what is considered to be the most appropriate form of crossing, a signal controlled crossing, is sought.

### **REPORT BY:**

ROGER ARCHER-REEVES  
LOCAL TRANSPORTATION DIRECTOR

### **SURREY ATLAS REF:**

Pg 94, B2

### **MOLE VALLEY DISTRICT WARD:**

BOOKHAM NORTH / SOUTH

### **COUNTY ELECTORAL DIVISION:**

BOOKHAM AND FETCHAM WEST

**OFFICER RECOMMENDATIONS:**

The Committee is asked to agree: -

- (i) **That the proposals to implement a signal controlled crossing in Lower Road as shown in ANNEXE 2 of this report be approved for progression and advertisement**
- (ii) **That if deemed necessary, and as described in paragraph 6.3 of this report, objections are formally considered by the Local Transportation Director, the Chairman of this Committee and Locally Elected Members.**

## **1.0 INTRODUCTION and BACKGROUND**

- 1.1 Requests have been received by community groups and elected Members for a pedestrian crossing facility in Lower Road, Bookham, between St Nicholas Avenue and Eastwick Road. An initial site investigation has established that the provision of pedestrian crossing facilities would serve to benefit pedestrian movements across Lower Road at this location. Situated within the local area are the Eastwick Infant and Junior schools, an active Youth Centre, near by bus stops and a public house, which collectively contribute to many pedestrian movements across Lower Road throughout the day.
- 1.2 Lower Road is a residential local distributor link road running in an east – west direction through the villages of Bookham and Fetcham. The road is a two-way, single carriageway at a width of approximately 7.0m. The road is street lit and subject to a 30mph speed limit.
- 1.3 In the vicinity of the site there are footways on both sides of the carriageway, however, in part, these are of a sub-standard width. Bus stops are located on both sides of the road, the northern side being served by a purpose built bus bay, and the southern side being marked by a bus stop marking within an area of the road adjacent to the main carriageway. Lower Road is mainly fronted by residential properties along its length, but in the vicinity of the site the aforementioned Youth Centre and public house lie to the north and south side of Lower Road respectively.

## **2.0 ANALYSIS AND COMMENTARY**

- 2.1 Pedestrian movements in the area are generated by a number of different sources. The main trip generator is the Eastwick Schools located to the north of Lower Road and accessed locally by Eastwick Park Avenue. The Eastwick Schools site houses both infant and junior schools and observation of Lower Road at school arrival and collection hours indicates that substantial numbers of schoolchildren cross Lower Road at this location, and use the footways adjacent to the Youth Centre and its access road as the preferred route to the schools from the south side of Lower Road. Other sources of pedestrian trip generation are the bus stops on each side of Lower Road, the local Youth Centre, nearby elderly residential homes, the public house and local shopping amenities.
- 2.2 Measurements of the existing sightlines for both pedestrians and drivers have been carried out on site to ensure that a designated crossing point would meet the relevant sightline criteria. Table 1 of Local Transport Note 2/95 indicates that the desirable minimum visibility distance for a pedestrian crossing with 85th%ile speeds of 35mph is 80m. On site surveys indicate that visibility over this distance can be met and exceeded. Table 3 of TD9/93 of the Design Manual for Roads and Bridges indicates that the desirable minimum stopping sight distance for drivers at a design speed equating to a 30mph speed limit is 90m. On site surveys indicate that visibility over this distance can be met and exceeded.

### **3.0 SURVEYS**

- 3.1 Pedestrian count surveys undertaken for a period of 12 hours between 07.00hrs and 19.00hrs were carried out at the site on Thursday 16 January 2003. The surveys show substantial numbers of pedestrian movements across Lower Road generated throughout the day between Eastwick Park Avenue and St Nicholas Avenue. In total 316 pedestrians were recorded as crossing Lower Road between the extents of the survey site. Of these 234 (74%) were adults and 82 (26%) were children. The main desire line across Lower Road was observed to be to the immediate west of St Nicholas Avenue. It was noted that the busiest crossing times were at school arrival and collection times. The full breakdown of the pedestrian surveys can be found in **ANNEXE 1**.
- 3.2 Speed surveys undertaken for a period of 24 hours over a 7-day period were also carried out from Tuesday 14 January 2003 to Tuesday 21 January 2003. Overall the surveys indicated that the 85th%ile speed of traffic was measured at 34mph westbound and 32mph eastbound. The surveys have also highlighted that the Lower Road carries a significant volume of traffic through the area. Average 24-hour traffic flows were measured at 3821 vehicles westbound and 3863 vehicles eastbound. Peak hour traffic volumes were recorded between 09:00hrs and 10:00hrs with 362 vehicles measured in a westbound direction and 368 vehicles in an eastbound direction.
- 3.3 In the three year period between November 1999 and October 2002 there was one recorded personal injury accident in Lower Road between Eastwick Park Avenue and St Nicholas Avenue. The accident occurred at the junction of Lower Road and St Nicholas Avenue. At the time of writing no further details were available.

### **4.0 OPTIONS CONSIDERED**

- 4.1 OPTION 1 - LOCALISED FOOTWAY WIDENING / UNCONTROLLED PEDESTRIAN CROSSING POINTS  
Footway widening could be provided on the north side of Lower Road and would be particularly appropriate in the vicinity of the bus shelter where waiting pedestrians can obstruct free passage along the footway. However on the south side footway widening could only be provided by reallocating the bus bay area to a footway. This will result in the width of the bus stop being reduced and unable to accommodate buses.
- 4.2 It is difficult to provide uncontrolled pedestrian crossing points within the current road layout. The main desire line across Lower Road has been observed as being to the immediate west of St Nicholas Avenue where pedestrians directly cross the bus bay. It is not appropriate to provide an uncontrolled crossing point at this location without relocating the bus bays.

**4.3** OPTION 2 - PEDESTRIAN REFUGE

The combined width of the carriageway running lanes of Lower Road is not currently wide enough to accommodate a pedestrian refuge without localised widening. This could be achieved by removing and relocating the bus stops, however site observations have also indicated that the provision of a pedestrian refuge on the pedestrian desire line may conflict with turning movements from St Nicholas Avenue and the vehicular access to the public house.

**4.4** OPTION 3 - ZEBRA CROSSING

Zebra crossings are most suited to locations where pedestrian crossing flows are relatively low on lightly trafficked roads. Lower traffic levels help pedestrians to establish priority over traffic and this is done by the pedestrian stepping onto the crossing. In situations where higher traffic flows exist younger or infirm pedestrians may feel it is hazardous to step onto the crossing where there are fewer perceived safe crossing opportunities.

**4.5** At sites where higher traffic speeds are experienced, pedestrians will require longer gaps in the traffic flow or be exposed to the risk of injury if the driver does not concede priority. Advice issued by the Department for Transport suggests that zebra crossings should not be installed on roads with an 85%ile speed of 35mph or above. Although the 85%ile speeds measured on Lower Road are within this limit it should be noted they are towards the upper limit stated, particularly the measurement of 34mph westbound.

**4.6** It is desirable to reduce the crossing distance to the minimum possible. This enables pedestrians to cross in a quicker time reducing the length of exposure within the carriageway, and to minimise the delay to drivers. Providing a zebra crossing in the pedestrian desire line across Lower Road would require the bus bays to be removed and relocated, and for the existing footways to be widened.

**5.0 SUGGESTED OPTION FOR IMPLEMENTATION**

**5.1** OPTION 4 - SIGNAL CONTROLLED CROSSING (PUFFIN CROSSING)

Signal controlled crossings are most suitable at locations where traffic speeds and volumes are higher and there are greater numbers of pedestrians crossing. In particular signal controlled crossings are easier for elderly or mobility impaired pedestrians to cross, as they do not have to step out onto the crossing to establish priority.

- 5.2 In locations where pedestrian flows are light for long periods of the day it is necessary to exercise caution over the use of signal controlled crossings. Drivers who become accustomed to not being stopped at the crossing may begin to ignore its existence with potentially dangerous consequences. The surveys undertaken at Lower Road are however considered to provide a high enough pedestrian demand for a signal controlled crossing to be considered appropriate.
- 5.3 In a similar situation to the zebra crossing layout described above providing a signal controlled crossing in the pedestrian desire line across Lower Road would require the bus bay areas to be removed and relocated, and for the existing footways to be widened.
- 5.4 The implementation of a signal controlled crossing is the type of crossing that has been requested by the Safe Routes to Schools co-ordinators within the Eastwick schools. The crossing has also formed part of a ranking list assessing the priorities of each school throughout the district and subsequently where Safe Routes to School funding could be directed. The Eastwick schools were ranked as the fourteenth highest priority during the financial year 2002/03. The schools ranked above this position largely received funding during the last financial year and the progression of a pedestrian crossing facility for access to the Eastwick Schools is now considered to be a priority.
- 5.5 On consideration of the above factors, it is therefore thought that the most appropriate form of pedestrian crossing facility is a signal controlled crossing, and an outline draft layout of the site is shown in **ANNEXE 2**. The installation of such a crossing would enable pedestrians to establish priority over traffic without the potential conflict of a zebra crossing, and it is suggested that this option be progressed.

## **6.0 CONSULTATIONS**

- 6.1 A copy of this report has been sent to the local District and County Council Members, the Mole Valley Access Group, Surrey Police, Fire and Ambulance emergency services, and Passenger Transport Group. Any comments received will be presented verbally at this meeting. A meeting has been held on site with Surrey Police and Passenger Transport Group who have indicated agreement in principle to a signal controlled crossing in Lower Road.
- 6.2 It is suggested that a site meeting is held prior to statutory advertisement of the crossing with local Members and residents. The purpose of this meeting would be to explain the proposed layout of the crossing on site and address any possible concerns raised by those local residents that may be affected by the implementation of the crossing.

- 6.3 With this type of scheme there is no statutory requirement to consider and resolve any objections formally made during the advertising process. However, it may be prudent to treat any representations received in line with the procedures adopted for Traffic Regulation Orders.

## **7.0 FINANCIAL IMPLICATIONS**

- 7.1 It is estimated that the total scheme construction costs will be in the region of £50,000 including for the advertisement of the necessary legal notice. The scheme could be funded from the Local Transport Plan Safe Routes to School Programme in the Leatherhead implementation area.

## **8.0 SUSTAINABLE DEVELOPMENT IMPLICATIONS**

- 8.1 The provision of a signal controlled crossing will provide a safe crossing point for pedestrians wishing to cross Lower Road to reach local schools, adjacent bus stops and local amenities. In particular the implementation of a crossing is likely to encourage a larger proportion of local journeys to be made on foot thereby contributing towards the objectives and targets of the Local Transport Plan.

## **9.0 CRIME & DISORDER IMPLICATIONS**

- 9.1 There are no crime and disorder implications associated with this report.

## **10.0 EQUALITIES IMPLICATIONS**

- 10.1 The implementation of improved pedestrian crossing facilities would be of benefit to the disabled and visually impaired pedestrians.

## **CONCLUSION AND REASONS FOR RECOMMENDATIONS**

The surveys undertaken indicate that there is a significant demand from pedestrians for crossing facilities across Lower Road between the junctions of Eastwick Park Avenue and St Nicholas Avenue. Many of the pedestrians crossing Lower Road are of school age or mobility impaired, and therefore more vulnerable than may be expected. The traffic surveys indicate the high level of use of Lower Road as a distributor road for the area, with 85th%ile speeds of 34 mph and 32 mph being in excess of the speed limit.

The measured sightlines indicate that a signal controlled crossing could be accommodated safely within the minimum desirable sightline requirements. The two bus stops adjacent to the site would need to be relocated to locations nearby, however these would still be in appropriate locations to meet local pedestrian demand.

On consideration of the above factors, it is considered that, subject to resolving any safety audit issues that may arise and subject to successful negotiations with local residents, the most appropriate form of pedestrian crossing facility is a signal controlled crossing, as shown in **ANNEXE 2** to this report. The installation of such a crossing would enable pedestrians to establish priority over traffic without the potential conflict of a zebra crossing, and it is suggested that this option be approved for progression and consultation.

**Report by: Roger Archer-Reeves, Local Transportation Director,  
Sustainable Development**

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**BACKGROUND PAPERS: None**

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ANNEXE 1

**PEDESTRIAN SURVEY RESULTS**

	Lower Road North - South			Lower Road South - North			Running totals			Prams
	Adult	Child	Total	Adult	Child	Total	Adult	Child	Total	
07:00 - 08:00	1	1	2	9	2	11	10	3	13	0
08:00 - 09:00	9	1	10	22	25	47	31	26	57	0
09:00 - 10:00	9	0	9	12	1	13	21	1	22	2
10:00 - 11:00	12	0	12	9	1	10	21	1	22	5
11:00 - 12:00	6	1	7	7	0	7	13	1	14	3
12:00 - 13:00	21	4	25	6	0	6	27	4	31	2
13:00 - 14:00	6	0	6	11	0	11	17	0	17	1
14:00 - 15:00	11	0	11	21	5	26	32	5	37	7
15:00 - 16:00	22	20	42	9	5	14	31	25	56	7
16:00 - 17:00	6	10	16	5	2	7	11	12	23	1
17:00 - 18:00	5	0	5	7	4	11	12	4	16	1
18:00 - 19:00	8	0	8	0	0	0	8	0	8	0
<b>TOTALS</b>	<b>116</b>	<b>37</b>	<b>153</b>	<b>118</b>	<b>45</b>	<b>163</b>	<b>234</b>	<b>82</b>	<b>316</b>	<b>29</b>