

**SURREY COUNTY COUNCIL****LOCAL COMMITTEE (SPELTHORNE)****DATE: 23 MARCH 2015****LEAD OFFICER: NICK HEALEY, AREA TEAM MANAGER (NE)****SUBJECT: A308 STAINES ROAD WEST SPEED ASSESSMENT****DIVISIONS: SUNBURY COMMON AND ASHFORD COMMON  
ASHFORD  
LALEHAM AND SHEPPERTON****SUMMARY OF ISSUE:**

There have been a total of 112 personal injury accidents in Staines Road West between January 2009 and April 2014, between Fairways and Sunbury Cross. The Casualty Reduction Working Group for Spelthorne, a meeting of road safety teams of Surrey County Council and Surrey Police, recommend that the Committee reduce the speed limit in this section to minimise the likelihood of further casualties.

**RECOMMENDATIONS:****The Local Committee (Spelthorne) is asked to:**

- (i) Approve the formal advertisement of Traffic Orders for a reduction in speed limit on the eastbound A308 Staines Road West from 50mph to 40mph between Fairways and a point 50m to the west of Cadbury Road;
- (ii) Approve the formal advertisement of Traffic Orders for a reduction in speed limit on the westbound A308 Staines Road West from 50mph to 40mph between a point 50m to the west of Ashford Road to a point 50m to the west of Cadbury Road;
- (iii) Approve the formal advertisement of Traffic Orders for a reduction in speed limit in both directions on the A308 Staines Road West from 40mph to 30mph between a point 50m to the west of Cadbury Road to the Sunbury Cross Roundabout;
- (iv) Authorise the Area Team Manager in consultation with the Chairman, Vice Chairman, relevant Divisional Member(s), Surrey Police and Surrey County Council's Road Safety Team to consider any objections made in response to the advertised proposals;
- (v) Subject to there being no significant objections, to approve the implementation of the proposed speed limit reductions;
- (vi) In the event that significant objections are received, to receive a report to a future meeting of the Local Committee to decide how to respond to such objections.

**REASONS FOR RECOMMENDATIONS:**

If the proposed speed limit reductions were to be implemented, evidence suggests that the frequency of accidents would reduce by an average of 5.25 accidents per year, with an economic benefit of over £1,000,000 over a three year period.

## **1. INTRODUCTION AND BACKGROUND:**

- 1.1 The 2,500m length of the A308 Staines Road West between Fairways and Sunbury Cross was presented to the Spelthorne Road Safety Working Group (RSWG) in December 2012. This is a meeting of road safety teams from Surrey Police and Surrey County Council. Originally, just the three main traffic signal junctions were discussed. The length between Jct. A244 Cadbury Road / Windmill Road and Sunbury Cross Roundabout was also discussed as a separate item.
- 1.2 Because of the complex nature of the accident problems, a series of site meetings were arranged to identify and agree some options. Although there were some measures identified at a number of locations along the length, it was agreed that only a reduction to the current speed limits would deliver significant accident savings.
- 1.3 In the longer term, it would be beneficial to upgrade the pedestrian facilities at three traffic signal junctions between Cadbury Road and School Road. Reducing the speed limits would support this aspiration.
- 1.4 It was therefore agreed to ask the Committee to consider reducing the speed limit from 50mph to 40mph approximately between Fairways and Jct. A244 Cadbury Road / Windmill Road and due to the very high level of accidents between Jct. A244 Cadbury Road / Windmill Road and Sunbury Cross Roundabout, it was agreed to ask the Committee to consider reducing the speed limit from 40mph to 30mph along this section.

## **2. ANALYSIS:**

### **Environment**

- 2.1 Staines Road West is an urban two lane dual carriageway, generally with three or four lane approaches to the three traffic signal junctions between School Road / Ashford Road and A244 Cadbury Road / Windmill Road.
- 2.2 The 1,825m length between Fairways and west of Jct. A244 Cadbury Road / Windmill Road is subject to a 50mph speed limit.
- 2.3 The 675m length between west of Jct. A244 Cadbury Road / Windmill Road and Sunbury Cross Roundabout is subject to a 40mph speed limit.
- 2.4 The section between Fairways and Cadbury Road / Windmill Road has largely residential properties flanking the road on the northern side, whereas the southern side is a mixture of commercial, industrial and sporting properties / grounds. There are a number of side roads, mostly residential on the northern side of Staines Road West.
- 2.5 The section between Cadbury Road / Windmill Road and Sunbury Cross Roundabout has a mixture of residential, offices, commercial and industrial premises flanking both the north and south sides of the road. There are two traffic signal junctions along this length. Escot Road is the main vehicular access to the Tesco Extra store, where there is a 600 space car park. Crossways is access to the Sunbury Cross multi-storey car park, offices and

other commercial premises. This is also the service road for some commercial deliveries.

#### **Accident history / summary by section**

- 2.6 There have been a total of 112 personal injury accidents along the lengths in question between January 2009 and April 2014. Of these, there have been two fatal accidents (2%) and 14 serious accidents (13%). There have also been skid / loss of control (14) (13%), pedestrian (11) (10%), pedal cycle (15) (13%), motor cycle (18) (16%), right turn (12) (11%), red light violation (16) (14%) and shunt accidents (48) (43%).
- 2.7 A308 Staines Road West, Ashford (Fairways – School Road) (400m): There have been just two accidents in this section. Both involved two vehicle shunts. The accident plot for this section is shown in Annex A.
- 2.8 A308 Staines Road West Jct. B378 School Road / C235 Ashford Road, Ashford (ATS) (125m): There have been 24 accidents at the traffic signal junction between January 2009 and April 2014. Of these, there have been shunt (10), red light violation (5), pedal cycle (5), right turn (4), motor cycle (3) and skid / loss of control (2). There have been three serious accidents. The accident plot for this section is shown in Annex B.
- 2.9 A308 Staines Road West, Ashford (School Road – Chertsey Road) (455m): There have been eight accidents along this length between January 2009 and April 2014. Of these, there have been shunt (3), skid / loss of control (3) and pedestrian (2). There has been one fatal accident in September 2009 involving a pedestrian. The accident plot for this section is shown in Annex C.
- 2.10 A308 Staines Road West Jct. Chertsey Road / Littleton Road, Ashford (ATS) (130m): There have been ten accidents at this traffic signal junction between January 2009 and April 2014. Of these, there have been shunt (6), skid / loss of control (4), motor cycle (2) and right turn (2). There have been two serious accidents. The accident plot for this section is shown in Annex D.
- 2.11 A308 Staines Road West, Ashford (Chertsey Road – Cadbury Road) (650m): There have been nine accidents along this length between January 2009 and April 2014. Of these, there have been shunt (4) and pedal cycle accidents. There has been one fatal accident in January 2014 involving a pedestrian and one serious accident. The accident plot for this section is shown in Annex E.
- 2.12 A308 Staines Road West Jct. A244 Cadbury Road / Windmill Road, Sunbury (ATS) (125m): There have been 22 accidents at this traffic signal junction between January 2009 and April 2014. Of these, there have been shunt (9), red light violation (6), right turn (4), motor cycle (3) and pedal cycle (2). There have been three serious accidents. The accident plot for this section is shown in Annex F.
- 2.13 A308 Staines Road West, Sunbury (Cadbury Road – Sunbury Cross) (615m): There have been 37 accidents along this length between January 2009 and April 2014. Of these, there have been shunt (14), motor cycle (9), pedestrian (6), red light violation (4), skid / loss of control (4), pedal cycle (3)

and right turn (2). There have been five serious accidents. The accident plot for this section is shown in Annex G.

### **Speed surveys**

- 2.14 Speed surveys were carried out in November 2013 and February 2014 at four locations along the length. Seven day speed and vehicle flow surveys were carried out near to the following junctions: Fairways, Hughes Road, Napier Road and Green Lane. Full details of the speed surveys are included in Annex H.
- 2.15 Fairways: This junction is in the current 50mph speed limit approximately 400m west of Jct. School Road / Ashford Road and 1,200m east Jct. Fordbridge Roundabout. Partly due to the change in environment compared to the rest of the length, the vehicle speeds are highest in this section, with the 85%ile speed being approximately 54mph and mean speed being approximately 47mph. These speeds are what would be expected in a 50mph limit. There is no proposal to change the speed limit west of this junction.
- 2.16 Hughes Road: The junction is in the current 50mph speed limit approximately 300m east of Jct. School Road / Ashford Road and approximately 270m west of Jct. Chertsey Road / Littleton Road. Compared to the Jct. Fairways, vehicle speeds are approximately 10mph lower. There is a greater urban feel. The 85%ile speed is approximately 45mph and the mean speed is approximately 37mph. These speeds are significantly lower to what would be expected in a 50mph limit and more in line with what would be expected in a 40mph limit.
- 2.17 Napier Road: The junction is in the current 50mph speed limit approximately 285m east of Jct. Chertsey Road / Littleton Road and approximately 440m west of Jct. Cadbury Road / Windmill Road. Vehicle speeds are slightly higher than those for Hughes Road. This may be explained by the fact that there is a sports ground on the southern side (over 500m length). This gives a slightly more open and less urban feel to the road. The 85%ile speed is approximately 48mph and the mean speed is approximately 41mph. These speeds are lower than those expected in a 50mph limit and but higher than would be expected in a 40mph limit.
- 2.18 Green Lane: This junction is approximately 375m east of Jct. Cadbury Road / Windmill Road and approximately 250m west of Jct. Sunbury Cross Roundabout. Vehicle speeds are significantly lower in that area than in all the other sections of Staines Road West. This part of the length has much more of an enclosed feel. The 85%ile speed is between 37 and 38.5mph, and the mean speed is between 29 and 31 mph. These speeds would be expected in a 30mph limit.

### **Recent works completed in Staines Road West**

- 2.19 A308 Staines Road West Jct. B378 School Road / C235 Ashford Road, Ashford:  
Installation of an eastbound red light camera (1999).  
The traffic signal heads were upgraded to LED lighting (2000).
- 2.20 A308 Staines Road West Jct. Chertsey Road / Littleton Road, Ashford:  
Installation of an eastbound red light camera (1996).

The traffic signals were upgraded to incorporate a controlled right turn phase for vehicles turning right into either Chertsey Road or Littleton Road (1999).

2.21 A308 Staines Road West Jct. A244 Cadbury Road / Windmill Road, Sunbury:

Installation of an eastbound red light camera (1999).

Installation of controlled pedestrian crossing facilities across Staines Road West and uncontrolled pedestrian crossing facilities across both Cadbury Road and Windmill Road (2006).

**Speed limit reduction and other scheme proposals**

2.22 Lower the current 50mph speed limit to 40mph between Fairways and 50m West Jct. Cadbury Road (eastbound) to 40mph.

2.23 Lower the current 50mph speed limit to 40mph between 50m West Jct. Cadbury Road and 50m West Jct. Ashford Road (westbound) to 40mph.

2.24 Lower the current 40mph speed limit to 30mph between 50m West Jct. Cadbury Road to West Jct. Sunbury Cross Roundabout.

2.25 Installation of three pedestrian crossing points near to Jct. Napier Road and Alexander Road. A diagram of this scheme is shown in Annex I.

**Other proposals that would be beneficial**

2.26 A308 Staines Road West Jct. Chertsey Road / Littleton Road, Ashford: Installation of controlled pedestrian crossing facilities across Staines Road West and uncontrolled pedestrian crossing facilities across both Chertsey Road and Littleton Road. There is no timescale or funding for this.

2.27 A308 Staines Road West Jct. B378 School Road / C235 Ashford Road, Ashford: Installation of controlled pedestrian crossing facilities across Staines Road West and uncontrolled pedestrian crossing facilities across both School Road and Ashford Road. There is no timescale or funding for this.

**Aims of speed limit reduction**

2.28 Reduction in vehicle speeds: Although the scheme's two main items are to reduce the respective speed limits by 10 mph, a realistic aim would be to reduce vehicle speeds by 5mph.

2.29 Reduction in accidents: A study by the Transport Research Laboratory (TRL) showed that for every 1mph reduction in speed, a reduction in accidents of around 5% could be expected.

2.30 Therefore, the 112 accidents over 5 years and four months would be reduced by 28 over the same period. This equates to 5.25 accidents/year or 15.75 over the standard three years used for before and after studies.

**Comparison of journey times**

2.31 Although the proposals are slightly different for the eastbound and westbound carriageways, west of Jct. School Road / Ashford Road, the approximate length of 50mph road is 1,825m and 40mph road is 675m.

2.32 If a vehicle was travelling at the current speed limits, with no delays or traffic light stops, it would require 81.66 secs (1,825m / 22.347) to complete the 50mph section and 37.76 secs (675m / 17.878) to complete the 40mph section. This is a total of 119.42 seconds.

2.33 If a vehicle was travelling at the proposed speed limits, with no delays or traffic light stops, it would require 102.08 secs (1,825m / 17.878) to complete the 40mph section and 50.34 secs (675m / 13.408) to complete the 30mph section. This is a total of 152.42 seconds.

2.34 This would mean that a journey time without delay would be extended by approximately 33 seconds.

### **3. OPTIONS:**

3.1 None at this stage. Officers will revert to the Chairman, Vice Chairman and Divisional Member, or indeed the Committee as appropriate, whenever preferred options need to be identified.

### **4. CONSULTATIONS:**

4.1 If the recommendations were to be approved the next stage in this project would be the advertisement of Traffic Orders for the proposed speed limit reductions.

### **5. FINANCIAL AND VALUE FOR MONEY IMPLICATIONS:**

5.1 It is estimated that the scheme will cost in the region of £50,000, which would be funded from the 2015-16 Road Safety budget.

5.2 As of June 2012, the average cost of an injury accident was estimated at £72,739.

5.3 If we consider that the accident reduction is 15.75 over three years, there is a possible saving to the community of £1,145,639.25 (15.75 x £72,739). This gives us a three year cost / benefit ratio of 22.91 (£1,145,639.25 / £50,000).

### **6. EQUALITIES AND DIVERSITY IMPLICATIONS:**

6.1 It is an objective of Surrey Highways to treat all users of the public highway equally and with understanding.

### **7. LOCALISM:**

7.1 The Local Committee has prioritised its expenditure according to local priorities.

## **8. OTHER IMPLICATIONS:**

8.1 A well-managed highway network can contribute to reduction in crime and disorder as well as improve peoples' perception of crime.

## **9. CONCLUSION AND RECOMMENDATIONS:**

9.1 It is recommended to reduce the speed limit on the A308 Staines Road West between Fairways and Sunbury Cross.

9.2 If the proposed reduction in speed limit were to be implemented, evidence suggests that the frequency of accidents would reduce by an average of 5.25 accidents per year, with an economic benefit of over £1,000,000 over a three year period.

## **10. WHAT HAPPENS NEXT:**

10.1 If the recommendations were to be approved officers would advertise the necessary Traffic Orders for the reductions in speed limit, with a view to implementing the changes in the new Financial Year 2015-16.

### **Contact Officers:**

Nigel Pond, Engineer (Road Safety)

Nick Healey, Area Team Manager (NE)

**Consulted:** N / A

**Annexes:** 9

### **Sources/background papers:**

1) Average cost of a road accident taken from Department for Transport statistics, *Average value of prevention of reported road accidents by road type: STATS19, Transport Analysis Guidance, WebTAG* (September 2013)

<http://www.dft.gov.uk/webtag/index.php>

2) Reduction in speed limit – expected reduction in accidents (TRL), *“Speed, Speed Limits and Accidents”* Finch et al, TRL Project Report 58. (TRL 1994)

<http://www.trl.co.uk/reports-publications/trl-reports/road-safety/report/?reportid=5562>

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