



Goudhurst Road, Marden

Zebra Crossing

Stage 4 Road Safety Audit



March 2014

Introduction

1.1 Auditor and Audit process

- 1.2 This report results from a Stage 4 Road Safety Audit carried out on the controlled zebra crossing installed in Goudhurst Road, Marden. The zebra Crossing is located in close proximity to Marden Primary School where a Children's Centre is also located. The site is generally residential, with properties with limited off street parking located on the eastern side of the road. Properties on the west side of the road are general set back from the carriageway with off street parking.

The road is subject to a 30mph speed limit by virtue of a system of street lights.

Warning signs and wig wag flashing lights are installed on both approaches. During the site visit a Speed Interactive Device (SID) was present on the northbound approach.

- 1.3 The audit was carried out by:

Kirstie Williams MCIHT Member Highway Fund Team Leader

- 1.4 The audit took place on Tuesday 25th February, and comprised of an inspection of the existing site plan and a site visit during daylight hours in clear weather.

- 1.5 The audit has been carried out following the procedures set out in the Kent County Council Guidance note for the provision of Safety Audit 2004. This process does not remove the school's responsibility to carry out a risk assessment of the site.

The team has examined the scheme with the sole purpose of identifying features which could be altered or removed to improve its safety. The team has not examined or verified the compliance of the design to any other criteria.

1.6 Classification of Safety Issues

Safety issues or concerns have been classified as follows:

- **PROBLEM:** feature requiring the most effort to resolve to reduce the potential of contributing to crashes or causing injury to road users.
- **COMMENT:** feature not considered as severe as a PROBLEM but still requiring some action by the design engineer.

- 1.7 Recommended solutions for problems identified during the audit are not absolute. There may be alternatives that will be applicable to produce the same or desired safety effect.

- 1.8 Where applicable, references to sign diagram numbers relate to sign reference numbers in the Traffic Sign Regulations and General Directions 2002.

2 ITEMS RAISED AT THIS STAGE 4 AUDIT

2.1 PROBLEM

Location: Northbound approach to the zebra crossing

Summary: Speed of traffic on the northbound approach

The speed of traffic on the northbound approach to the crossing site was observed to be generally above the posted 30mph speed limit. This is exacerbated further by the presence of parked vehicles on the eastern side of the approach (photo 1) which slows traffic exiting the village but maintains a higher speed for traffic entering and approaching the crossing.

This was observed to result in late braking by drivers when a pedestrian was on the western side of the crossing. There is some evidence of skid marks on the high friction surface on this approach. This may result in drivers failing to brake in time or failing to stop and striking a pedestrian using the crossing.



Photo 1 – Parked vehicles on the eastern side of the road

RECOMMENDATION

It is recommended that a permanent interactive sign is installed on the northbound approach displaying the sign to diagram 545 with SLOW message beneath. It is also recommended that dragons' teeth markings are installed to further enhance the existing SLOW marking on the northbound approach.

2.2 PROBLEM

Location: Zebra Crossing facility

Summary: Conspicuity of flashing beacons

The presence of the zebra crossing is not conspicuous during daylight hours due to the beacons being installed against a busy street scene (photo 2). This may result in late recognition of the facility and late braking on the approach or failure to stop which may lead to a collision with pedestrians using the crossing.



Photo 2 – Busy street scene makes the beacons less conspicuous

RECOMMENDATION

It is recommended that backing boards and alternative hoods are installed to increase the conspicuity of the crossing location.

2.3

PROBLEM

Location: Zebra Crossing facility

Summary: The forward visibility towards the crossing from the northbound approach is restricted

The measured stopping sight distance (SSD) for drivers approaching the crossing northbound towards the western beacon is 43m (Photo 3). The required SSD for a 30mph approach speed is 43m. If traffic was travelling at 37mph the required SSD would be 59m (Manual for Streets 2) which will result in late braking if traffic is travelling at more than the posted 30mph speed limit. Visibility for pedestrian towards northbound traffic is further reduced by the presence of an A fame sign within the visibility splay and the overgrown boundary hedge (Photo 4).



Photo 4 – Visibility looking south from the western side of the crossing

RECOMMENDATION

It is recommended that the recommendations in 2.1 and 2.2 are implemented. If the traffic survey recommended in 2.1 reveals traffic at significantly higher speeds than the posted speed limit, more substantial traffic management or calming features will be required.

It is also recommended that the existing zig zag markings are extended on all corners of the crossing to increase the advance warning of the crossing.

It is recommended that the A frame sign is removed and that the hedge is reduced to increase the visibility splay.

2.4

COMMENT

Location: Zebra Crossing facility

Summary: Incorrect tactile paving colour

The crossing has been installed with buff coloured paving and this should be red for a controlled crossing. This may result in partially sighted pedestrians failing to recognise the type of crossing and using less suitable crossing locations.

RECOMMENDATION

It is recommended that the tactile paving colour is changed to the correct red colour.

2.5

COMMENT

Location: Northbound approach to crossing

Summary: Vegetation in front of warning sign

The existing advance warning sign on the northbound approach is partially covered in vegetation.

It is recommended that the vegetation be cleared from the sign.

3. Audit Team Statement

I have examined the design drawings and documents provided. I have inspected the site. The audit has been carried out in accordance with Kent County Council Guidance note for the provision of Safety Audit 2004. I have not been involved in the scheme design. The identified issue(s) has/have been noted in this report with the accompanying recommendation(s) put forward for you to consider for implementation.

AUDIT TEAM LEADER

Kirstie Williams MCIHT

Signed: *Kirstie Williams*

Date: 13th March 2014

REPORT RESPONSE SHEET

Goudhurst Road, Marden – Zebra Crossing In Service Safety Review

Issues Identified	Recommendations	Decision And Proposed Action
<p>PROBLEM</p> <p>Location: Northbound approach to the zebra crossing</p> <p>Summary: Speed of traffic on the northbound approach</p> <p>The speed of traffic on the northbound approach to the crossing site was observed to be generally above the posted 30mph speed limit. This is exacerbated further by the presence of parked vehicles on the eastern side of the approach (photo 1) which slows traffic exiting the village but maintains a higher speed for traffic entering and approaching the crossing.</p> <p>This was observed to result in late braking by drivers when a pedestrian was on the western side of the crossing. There is some evidence of skid marks on the high friction surface on this approach. This may result in drivers failing to brake in time or failing to stop and striking a pedestrian using the crossing.</p> <p>RECOMMENDATION</p> <p><i>It is recommended</i> that a permanent interactive sign is installed on the northbound approach displaying the sign to diagram 545 with SLOW message beneath. It is also recommended that dragons' teeth markings are installed to further enhance the existing SLOW marking on the northbound approach.</p>		
<p>2.2 PROBLEM</p> <p>Location: Zebra Crossing facility</p> <p>Summary: Conspicuity of flashing beacons</p> <p>The presence of the zebra crossing is not conspicuous during daylight hours due to the beacons being installed against a busy street scene (photo 2). This may result in late recognition of the facility and late braking on the approach or failure to stop which may lead to a collision with pedestrians using the crossing.</p>		

<p>RECOMMENDATION</p> <p><i>It is recommended</i> that backing boards and alternative hoods are installed to increase the conspicuity of the crossing location.</p>		
<p>2.3 PROBLEM</p> <p>Location: Zebra Crossing facility</p> <p>Summary: The forward visibility towards the crossing from the northbound approach is restricted</p> <p>The measured stopping sight distance (SSD) for drivers approaching the crossing northbound towards the western beacon is 43m (Photo 3). The required SSD for a 30mph approach speed is 43m. If traffic was travelling at 37mph the required SSD would be 59m (Manual for Streets 2) which will result in late braking if traffic is travelling at more than the posted 30mph speed limit. Visibility for pedestrian towards northbound traffic is further reduced by the presence of an A fame sign within the visibility splay and the overgrown boundary hedge (Photo 4).</p> <p>RECOMMENDATION</p> <p>It is recommended that the recommendations in 2.1 and 2.2 are implemented. If the traffic survey recommended in 2.1 reveals traffic at significantly higher speeds than the posted speed limit, more substantial traffic management or calming features will be required.</p> <p>It is also recommended that the existing zig zag markings are extended on all corners of the crossing to increase the advance warning of the crossing.</p> <p>It is recommended that the A frame sign is removed and that the hedge is reduced to increase the visibility splay.</p>		
<p>2.4 COMMENT</p> <p>Location: Zebra Crossing facility</p> <p>Summary: Incorrect tactile paving colour</p> <p>The crossing has been installed with buff coloured paving and this should be red for a controlled crossing. This may result in partially sighted pedestrians failing to recognise the type of crossing and using less suitable crossing locations.</p> <p>RECOMMENDATION</p> <p>It is recommended that the tactile paving colour is changed to the correct red colour.</p>		

<p>2.5 COMMENT</p> <p>Location: Northbound approach to crossing</p> <p>Summary: Vegetation in front of warning sign</p> <p>The existing advance warning sign on the northbound approach is partially covered in vegetation.</p> <p>It is recommended that the vegetation be cleared from the sign.</p>		
<p>Signed: Dated:</p>		