



LAND TO THE EAST OF TYE LANE, WALBERTON

A27 ARUNDEL ROAD / B2132 YAPTON LANE - EXTENSION OF A27 RIGHT TURN LANE

ROAD SAFETY AUDIT STAGE 1

on behalf of i-Transport LLP

M & S Traffic reference no: IT/11324RT/1/BS

August 2017

M & S Traffic Ltd
Aeolus House
32 Hamelin Road
Gillingham
Kent ME7 3EX

Tel: +44 1634 307498

Directors:
Martin Morris & Bryan Shawyer
Company Reg. No. 06730905
Registered Office: 32 Hamelin Road, Gillingham, Kent ME7 3EX

1. INTRODUCTION

- 1.1. This report results from a Stage 1 Road Safety Audit carried out on the A27 Arundel Road junction with the B2132 Yapton Lane, Walberton at the request of David Bowie, Highways England Company Ltd, the Highway Authority Project Sponsor. The Road Safety Audit was carried out during August 2017.
- 1.2. The Road Safety Audit Team membership approved by David Bowie, the Overseeing Organisation Project Sponsor was as follows:

Bryan Shawyer, BEng (Hons), MSc, MCIHT, MSoRSA
M & S Traffic Limited
(Certificate of Competency in Road Safety Audit gained in July 2012)

Martin Morris, PGD, MCIHT, MSoRSA
M & S Traffic Limited
(Certificate of Competency in Road Safety Audit gained in April 2012)
- 1.3. The Road Safety Audit took place at the Gillingham Office of M & S Traffic on 23 August 2017. The Road Safety Audit was undertaken in accordance with the Road Safety Audit Brief provided by Tim Wall, Design Team Leader, i-Transport LLP, Grove House, Lutyens Close, Chineham Court, Basingstoke, Hampshire RG24 8AG as approved by the Project Sponsor Highways England. The Road Safety Audit comprised an examination of the documents provided and these are listed in Annex A. The documents consisted of a set of the preliminary design drawings, a summary of the general details of the scheme including traffic flows, 5-year crash data, predicted queue lengths, Non-Motorised User context and Audit Reports. The Audit Team visited the site together on the afternoon of 24 August 2017 between 16.45pm and 18.00pm. During the site visit the weather was fine and the existing road surface was dry. Traffic conditions were free flowing. No pedestrian or cyclist movements were observed in the audit.
- 1.4. The terms of reference of the Road Safety Audit are as described in HD 19/15. The Road Safety Audit Team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria.
- 1.5. All comments and recommendations are referenced to the detailed design drawings and the locations have been indicated on the A3 plan supplied with the Road Safety Audit Brief in Annex B.
- 1.6. The scheme comprises of extending the right turn lane on the western A27 arm approach to Yapton Lane. The right turn lane is currently approximately 110m in length and it is proposed to extend this to 220m in order to bring the design of the right turn lane in line with DMRB TD42/95 standards (for a design speed of 120kph). The right turn lane will then comprise; a 110m deceleration lane, an 80m turning length and a 30m direct taper.
- 1.7. Accident data was supplied from March 2012 to February 2017 for the junction. Reviewing the accident data during this period there have been 2 accidents at the junction, which have both been slight accidents. One accident involved a light goods vehicle that failed to give way to a cyclist, the second involved a car that lost control in icy conditions.

2. ITEMS RAISED AT THE STAGE 1 ROAD SAFETY AUDIT

2.1. GENERAL

2.2. PROBLEM

Location: A (drawing ITB11324-GA-014 rev B) – A27 eastbound approach to junction.

Summary: Ponding of surface water combined with carriageway profile changes could lead to loss of control accidents.

The kerblines on the centre reservation are being amended as part of these proposals. Consequently, the position of the existing gully on the westbound carriageway may be in an unsuitable position to achieve positive carriageway drainage, leading to possible ponding. Ponding on the carriageway could lead to loss of control accidents in wet or icy conditions.

RECOMMENDATION

That horizontal and vertical profiles should be such that water is shed, or that the gully is relocated to prevent ponding.

2.3. THE ALIGNMENT

2.4. No comment.

2.5. THE JUNCTIONS

2.6. No comment.

2.7. NON-MOTORISED USERS (NMUs)

2.8. No comment.

2.9. SIGNING AND LIGHTING

2.10. PROBLEM

Location: B (drawing ITB11324-GA-014 rev B) – A27 eastbound approach to junction.

Summary: Position and specification of a local direction sign could compromise road safety.

There is an existing local directional sign in the central reservation, indicating destinations and distances for right turning traffic, see figure 1 below, where no details of the relocation or removal of this sign have been provided. Amendments to the central reservation may position this sign in the carriageway running lane. Further, the sign is not passive and is situated at the end of a right turn lane, which is proposed to be extended, where there is potential for greater approach speeds. In the event of a loss of control accident, collision with a non-passive sign could increase the severity of the accident.



Figure 1: Existing Local Direction Sign could compromise road safety.

RECOMMENDATION

That the sign should be repositioned within the verge area of the central reservation and that this sign should be passive.

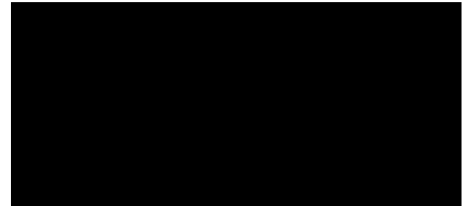
3. AUDIT TEAM STATEMENT

We certify that this Road Safety Audit has been carried out in accordance with HD 19/15.

ROAD SAFETY AUDIT TEAM LEADER

Bryan Shawyer
BEng (Hons), MSc, MCIHT, MSoRSA
M & S Traffic Ltd
Aeolus House
32 Hamelin Road
Gillingham
Kent ME7 3EX

Signed

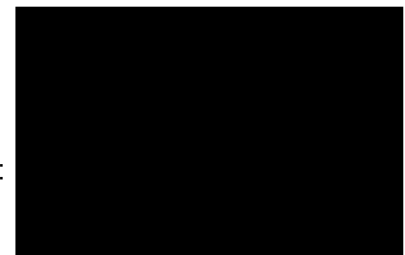


Date: 27/08/17

ROAD SAFETY AUDIT TEAM MEMBER

Martin Morris
PGD, MCIHT, MSoRSA
M & S Traffic Ltd
Aeolus House
32 Hamelin Road
Gillingham
Kent ME7 3EX

Signed:



Date: 27/08/17

Annex A - List of Drawings and other information submitted for auditing:

Reference	Title	Date
TW/RS/ITB11324-008B TN	Road Safety Audit Brief, Land to the East of Tye Lane, Walberton – Road Safety Audit Stage 1	July 2017
ITB11324	Design Check for Departures from Mandatory Standard	
TW/RA/ITB/11324-009A R	Land east of Tye Lane, Walberton – Walking, Cycling and Horse-Riding Assessment	July 2017
Walberton HE RSA Queries	Scheme 1: Extension to the right turn-lane	August 2017
Figure T1	Land east of Tye Lane, Walberton, Site Location Plan	
ITB11324-GA-014 B	Proposed Extension to A27 Yapton Lane Right Turn	
ITB11324-SK-006	Proposed Extension to A27 Yapton Lane Right Turn - Swept Path Analysis Large Articulated Vehicle	
ITB11324-GA-Q16	Personal Injury Accident, Stick Diagrams	
17060	West Sussex Injury Accident Engineers Report, Fontwell Walberton Area – 5 Years to 28 Feb 2017	

Annex B - A3 Plan attached showing the locations of the problems identified as part of this audit.