

Stage 1 Road Safety Audit
A49 / Cromwell Avenue, Warrington
Capacity Improvement Measures

Date: 29/01/2021

Report produced for: Satnam Millennium Ltd

Report requested by: Highgate Transportation Ltd

On behalf of: Warrington Borough Council

Report prepared by: Kevin Seymour, Road Safety Consulting Ltd

Reference: RSC/KS/EB/20044

Document Control Sheet

Project Title A49 / Cromwell Avenue, Warrington
Capacity Improvement Measures

Report Title Stage 1 Road Safety Audit
Reference: RSC/KS/EB/20044

Revision -

Status Final

Control Date 29/01/2021

Record of Issue

Issue	Author	Date	Check	Date	Authorised	Date
Final	KS	28/01/21	EB	29/01/21	EB	29/01/21

Distribution

Organisation	Contact	Copies
Highgate Transportation Ltd	Fiona Bennett	ecopy
Warrington Borough Council		

Road Safety Consulting Ltd
4 Paramore Close
Whetstone
Leicestershire
LE8 6EY
Registered in England and Wales
Company Number 5225549

1. Introduction

- 1.1. This report results from a Stage 1 Road Safety Audit carried out on the proposed Capacity Improvement Measures associated with the signalised roundabout junction of the A49 / Cromwell Avenue, Warrington. The Audit was carried out during January 2021.
 - 1.2. This Road Safety Audit was produced for (client organisation): Satnam Millennium Ltd, requested by (design organisation): Highgate Transportation Ltd, on behalf of (overseeing organisation): Warrington Borough Council.
 - 1.3. The Road Safety Audit Brief was provided by Fiona Bennett of Highgate Transportation Ltd. The audit team was approved by Fiona Bennett of Highgate Transportation Ltd. The audit team considers that the audit brief is sufficient to carry out this Stage 1 Road Safety Audit.
 - 1.4. The Audit Team membership was as follows:
 - Audit Team Leader
Kevin Seymour
B Sc, PG Dip TS, MCIHT, MSoRSA
Highways England Certificate of Competence (Road Safety Audit)
Road Safety Consulting Ltd

 - Audit Team Member
Elaine Bingham
B Eng (Hons), MCIHT, MSoRSA
Highways England Certificate of Competence (Road Safety Audit)
Road Safety Consulting Ltd
 - 1.5. The audit took place at the offices of Road Safety Consulting Ltd between 25th and 29th January 2021. The audit was undertaken in accordance with the audit brief and the report has been prepared with reference to the Design Manual for Roads and Bridges (DMRB) GG 119.
 - 1.6. The Audit Team visited the site together on the 25th January 2021 between 1:00pm and 2:00pm periods. Weather conditions at the time of the audit was cloudy and dry. The road surface was damp. Traffic flows were low. A number of pedestrians and cyclists were observed during the site visit.
 - 1.7. Low traffic volumes may, in part, be due to the coronavirus lockdown, however, the Audit Team was satisfied that the road safety audit would not be compromised by the lockdown travel restrictions.
 - 1.8. The audit comprised an examination of the information provided by the Design Organisation and listed in Appendix 1.
-

- 1.9. The 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.
- 1.10. All comments and recommendations are referenced to the design drawing and the locations have been indicated on plans in Appendix 2.

2. Items Considered

2.1. Scheme Proposals

2.1.1. The development proposals are associated with a new residential neighbourhood on land at Peel Hall, Warrington.

2.1.2. The highway improvement scheme work consists of:

- The lengthening and widening of the A49 northbound left-turn lane to A574 Cromwell Avenue and associated works including the relocation of a bus stop and offset of pedestrian footway.
- There will be a requirement to also repaint lane destination road markings on the southern circulatory of the A49 roundabout to ensure lane discipline.

2.2. Information Provided to the Audit Team

2.2.1. Information that has been provided to the Audit Team, for the purpose of this audit, is as outlined within the Road Safety Audit Brief and Appendix 1 of this report.

2.2.2. It is understood that no previous Road Safety Audits have been carried out on these proposals.

2.3. Departures from Standards (Design)

2.3.1. The Audit Team has not been advised of any design departures from standards.

2.4. Departures from Standards (Road Safety Audit)

2.4.1. This Road Safety Audit has been produced, with reference to DMRB – GG 119 – Road Safety Audit with the following exception.

- It is unclear whether the Road Safety Audit brief provided has been approved Warrington Borough Council, however the Audit Team did not consider that the lack of a formally approved brief would compromise the production of a Road Safety Audit for these proposals.

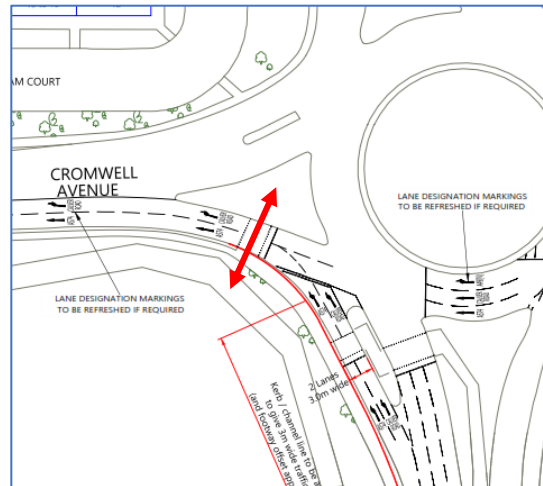
3. Items Raised by this Stage 1 Road Safety Audit

3.1. Walking, Cycling & Horse Riding

3.1.1. Problem

Location: At the Cromwell Avenue signalled crossing

Summary: Failure to stop type collisions involving pedestrian injury



The audit team noted that drivers emerging from the left slip lane occasionally ran a red light, when the pedestrian crossing was green for vulnerable users. This occurrence may be exacerbated when the left slip is two lanes wide and when larger vehicles may obscure signal heads and pedestrians waiting on the southern footway. Red light running may lead to pedestrian to vehicle collisions.

Recommendation:

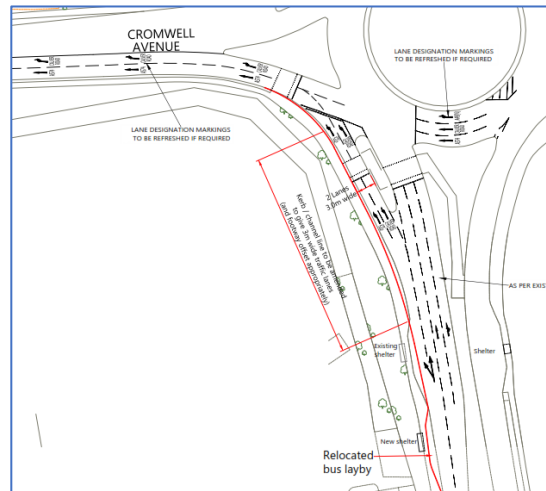
It is recommended that the left slip lane is fully signalled, removing the left slip lane give way facility, incorporating the signal crossing into the junction control strategy, to remove the potential for failure to stop type collisions at the crossing.

3.2. Junctions

3.2.1. Problem

Location: At the left slip lane

Summary: Lane change collisions on Cromwell Avenue



The provision of a two lane left slip lane may increase the likelihood of lane changes on the Cromwell Avenue link between the junction and Calver Road. Lane changes may lead to side-swipe type collisions.

Recommendation:

It is recommended that vertical lane destination signing is provided to clarify lane allocations at the left slip lane.

End of Safety Comments

4. Audit Team Statement

We certify that this Stage 1 Road Safety Audit has been carried with reference to GG 119.

Audit Team Leader

Kevin Seymour
B Sc, PG Dip TS, MCIHT, MSoRSA
Highways England Certificate of Competence (Road Safety Audit)

Signed:  Dated 28th January 2021.
Director of Road Safety Consulting Ltd

Audit Team Member

Elaine Bingham,
B Eng (Hons), MCIHT, MSoRSA
Highways England Certificate of Competence (Road Safety Audit)
Director of Road Safety Consulting Ltd

Signed:  Dated 29th January 2021.
Director of Road Safety Consulting Ltd

Road Safety Consulting Ltd
4 Paramore Close
Whetstone
Leicestershire
LE8 6EY

APPENDIX 1: Information Provided

List of Information Provided

Document Reference Number	Revision	Title
Drawing 1901/27/B	B	Preliminary sketch for Mitigation at A49/Cromwell Avenue/Sandy Lane West Junction
Drawing 1901/30		Existing situation at A49/Cromwell Avenue/Sandy Lane West Junction
Drawing 1901/TR03		Swept path analysis of proposed improvement works
Transport Assessment Addendum (March 2020)		-
WBC Accident Records		-
CrashMap report and accident details		-
WMMTM16 output flow diagrams for 2022 and 2032, Do Minimum and Do Something scenarios		-
2019 MCC data and queue lengths		-
VISSIM Base Model Report (October 2020)		-
VISSIM Future Years Modelling Report (November 2020)		--
Traffic signal staging for A49/Cromwell Avenue/Sandy Lane West Junction		-

APPENDIX 2: Drawing Showing Problem Locations

Problem numbers shown on the attached drawing refer to Problem numbers within the report.

