A658 HARROGATE ROAD / A657 NEW LINE JUNCTION, GREENGATES

Option 30

P-Loop Scheme

STAGE 1 ROAD SAFETY AUDIT (RSA)

Design Engineer: Richard Broughton

Auditor(s): James Williams Kavin Stoddart

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18.0 INTRODUCTION

This Stage 1 Road Safety Audit has been carried out on A658 Harrogate Road / A657 New Line, proposed P-Loop scheme.

The Audit was undertaken at the request of Richard Broughton provided on 11th August 2014.

Audit Team Members were:-

James Williams Kavin Stoddart

The Audit took the form of an examination of the drawings and documents listed in Appendix A to this report, on 14th August 2014.

The comments and recommendations of the Audit Team have been recorded using the Stage 1 Road Safety Audit checklist headings from Departmental Advice Note HD 19/03 (see Section 2 of this report).

The Audit team has examined and reported on the road safety aspects of the scheme as presented and has not examined or verified the compliance of the design to any other standards or criteria.

The Audit Team have reviewed the collision data provided that identifies that the most frequent collisions involve pedestrians crossing A658 Harrogate Road and A657 New Line.

The proposed scheme that includes controlled pedestrian crossing facilities will improve safety for pedestrians crossing at the junction.

2.0 ITEMS RAISED AT THIS STAGE 1 ROAD SAFETY AUDIT

2.1 **GENERAL**

2.1.1 Departures from Standards

No departures from standards have been reported by the design team.

2.1.2 Cross Sections

No details have been provided by the design team.

2.1.3 Drainage

No details have been provided by the design team.

2.1.4 Climatic Conditions

No comment.

2.1.5 Landscaping

No details have been provided by the design team.

2.1.6 Public Utilities / Services Apparatus

No details have been provided by the design team.

2.1.7 Lay-bys

No comment.

2.1.8 Access

(a) Problem:

Potential conflict for "right" turn manoeuvres upon access / egress at property no.927 (PH) on A658 Harrogate Road due to the proposed increase of traffic lanes.

Recommendation

Extend the traffic island to prevent "right" turn manoeuvres.

<u>Designers Response</u>

Traffic island has been extended and left turn only signs to be installed at the junction

(b) Problem:

Egress from side road between properties no. 919 and 921 on A658 Harrogate Road is within an Advanced Stop Line and conflict with "right" turn manoeuvres.

Recommendation

Relocate the stop lines and extend traffic island to prevent "right" turn manoeuvres.

Designers Response

Traffic island has been extended and left turn only signs to be installed at the junction

2.1.9 Emergency Vehicles

No comment.

2.1.10 Skid Resistance

No details have been provided by the design team.

2.1.11 Future Widening

No comment.

2.1.12 Adjacent Development / Agriculture

No comment.

2.1.13 Fences and Road Restraint Systems

No details have been provided by the design team.

2.1.14 Basic Design Principles

No comment.

2.2 LOCAL ALIGNMENT

2.2.1 Visibility

No comment.

2.2.2 New / Existing Road Interface

No comment.

2.2.3 Vertical Alignment

No details have been provided by the design team.

2.3 JUNCTIONS

(a) Problem:

Conflict of vehicles turning "right" out of Stockhill Road (currently 1 way) onto A658 Harrogate Road due to the proposed increase of traffic lanes and P-Loop system.

Recommendation

Signalise the A658 Harrogate Road / Stockhill Road junction or create a "left" turn only out of Stockhill Road by extending the nearby traffic island to prevent a "right" turn manoeuvre.

Designers Response

Left turn only signs to be installed at the junction

2.4 NON MOTORISED USER PROVISION

2.4.1 Adjacent Land

No comment.

2.4.2 Pedestrians

(a) Problem:

Staggered pedestrian crossings on the islands are close together. Space for pedestrians to cross may be restricted once signal equipment is installed.

Recommendation

Extend traffic islands to create more space.

Designers Response

Traffic islands have been extended with pedestrian areas increased.

(b) Problem:

Uncontrolled island crossing over A658 Harrogate Road near the junction of Stockhill Road may to be too small to accommodate large volumes of pedestrians particularly at the opening and closing times of Greengates Primary School. Parents and children may spill out onto the carriageway when waiting to cross. The proposed island also encourages people to cross at this location over 4 traffic lanes and 2 cycle lanes.

Recommendation

Implement a controlled pedestrian crossing.

Designers Response

New controlled pedestrian crossing proposed at this location with central island for increased pedestrian safety.

(c) Problem:

No pedestrian crossing facility near pedestrian desire line along A658 Harrogate Road over the new P Loop lane

Recommendation

Introduce pedestrian crossing facilities

Designers Response

Uncontrolled pedestrian crossing installed at the above location

2.4.3 Cyclists

(a) Problem:

No safe cycling provisions to and from Greengates Primary School have been shown.

Recommendation

Implement shared space footways and contra-flow for cyclists on Stockhill Road.

Designers Response

Cyclist provision on Stockhill Road to be incorporated in the detailed design

2.4.4 Equestrians

No comment.

2.5 ROAD SIGNS, CARRIAGEWAY MARKINGS AND LIGHTING

2.5.1 Signs

No details have been provided by the design team.

2.5.2 Lighting

No lighting details have been provided by the deign team.

2.5.3 Poles and Columns

No lighting details have been provided by the deign team.

2.5.4 Road Markings

No comment (preliminary road marking details provided).

3.0 AUDIT STATEMENT

We certify that we have examined the drawings and documents listed in the Appendices to this report for the purpose of identifying any feature of the design that could be modified to improve the safety of the scheme. Issues that we have identified are contained within this report together with recommendations for consideration by the design team.

No member of the audit team has been involved in the design of this scheme.

Audit Team

Signed MUMNU

Date 13-11-14

Name: James Williams

Signed J. H.

Date 13-11-14

Name: Kavin Stoddart

4.0 **Designers Response**

Date 13-11-14

Name: Richard Broughton **Designer**

RSA - APPENDIX A

List of Drawings and Documents Examined

- Road Safety Audit Brief
- Collision data plan
- Collision report
- Drawing R/M/MH/101463/30A