M & S Traffic

Road Safety Audit Stage 2

Westgate Road/ Sherborne Mini Roundabout

Chichester

West Sussex

Date: 16th November 2020

Report produced for: Jubb

Report produced by: M & S Traffic

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Report Title:	Westgate Road/ Sherborne Mini Roundabout Road Safety Audit Stage 2
Date:	16th November 2020
Document reference and revision:	JUB/20/19183/2/MM
Prepared by:	M & S Traffic
On behalf of:	West Sussex County Council

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Appendix A……. List of drawings

Appendix B……. Comment location drawing

1 INTRODUCTION

1.1 This report describes a Stage 2 Road Safety Audit carried out on a proposed traffic scheme at the junction of Sherborne Road and Westgate Chichester West Sussex, including:

- Two raised parallel crossings also known as "Tiger" crossings.
- A raised pedestrian crossing, with carriageway widening.
- The provision of shared use cycleways and footways.
- Signage renewal.

The Audit was requested by the design organisation, Jubb, 2A Oak Tree Court, Mulberry Drive, Cardiff Gate Business Park, Cardiff CF23 8RS LH, on behalf of West Sussex as the Highway Authority.

1.2 The Audit Team membership were as follows:

Martin Morris, PGD, MCIHT, MSoRSA – Audit Team Member
Highways England Approved RSA Certificate of Competency

Bryan Shawyer B.Eng. (Hons), MSc, MCIHT, MSoRSA – Audit Team Leader
Highways England Approved RSA Certificate of Competency

1.3 The documents available at the time the report was compiled are detailed in Appendix A.

1.4 The Audit took place at the Gillingham offices of M&S Traffic in November 2020 and comprised an examination of the documents provided as listed in Appendix A, plus a joint visit to the site of the proposed scheme during the morning of the 11th November 2020 between 11:15 and 12:00. Weather conditions at the time were fine and the road surface was damp. Traffic flows and speeds were low. Low level pedestrian and cyclist movements were observed during the site visit; however, the audit was undertaken in the Covid-19 outbreak.

1.5 The report has been compiled, only with regards to the safety implications for road users of the layout presented in the supplied drawings. It has not been examined or verified for compliance with any other standards or criteria. This audit does not perform any "Technical Check" function on these proposals. It is assumed that the Project Sponsor is satisfied that such a "Technical Check" has been successfully completed prior to requesting this audit.

1.6 No Departures from Standard, traffic flow or personal injury accident data was provided to the Audit Team.

1.7 All comments and recommendations are referenced to the detailed drawings and the locations have been detailed relating to the plans supplied with the audit brief, Appendix B.

2 SAFETY ISSUES RAISED AT PREVIOUS AUDITS

2.1 No previous safety audits were submitted for assessment.

3 ITEMS RAISED AT THE STAGE 2 AUDIT

3.1 General

3.1.1 PROBLEM

Location: Proposed ramps to crossings.

Summary: Dimensions of tables could lead loss of control collisions

No details of the ramp profiles or height of raised carriageway have been provided for assessment. There is concern that if the height is outside normal ranges, this could lead loss of control collisions

RECOMMENDATION

It is recommended that ramp profiles should be within normal accepted ranges.

3.1.2 PROBLEM

Location: Approaches to the proposed Tiger crossings.

Summary: Inappropriate surfacing could compromise road safety.

The proposals do not include the introduction of anti-skid surfacing or a surface with a high Polished Stone Value (PSV). Surfacing with an inadequate PSV could lead to vehicles not being able to stop, leading to possible rear end shunt or vehicle to pedestrian collisions.

RECOMMENDATION

It is recommended that high friction surfacing should be provided on the approaches to the crossings and continue to the crossing carpets.

3.1.3 PROBLEM

Location: Overrun area at the roundabout entry.

Summary: Inappropriate surfacing could compromise road safety.

The proposals appear to show a 25mm kerb upstand and the relaying of the existing block paved surfacing. The Polished pavior value (PPV) of the block paving is unknown and surfaces with an inadequate PPV could lead to vehicles losing control when turning. Leading to collisions, vehicle overturning or load shifting.

RECOMMENDATION

It is recommended that the PPV should be similar to the PSV of the surrounding carriageway areas and adequate for the speed of the road.

3.2 Local Alignment

3.2.1 No comment.

3.3 Junctions

3.3.1 No comment.

3.4 Non-Motorised User (NMU) Provision

3.4.1 **PROBLEM**

Location: Proposed footway and cycleway Westgate.

Summary: Existing ditch and lack of restraint system could compromise cyclist and pedestrian safety.

The footway and cycleway traverse an open ditch, where no details of barriers to prevent pedestrian or cyclist incursion into the ditch particularly during the hours of darkness, have been shown, which could result in injury.

RECOMMENDATION

It is recommended that fencing should be provided and that details should be supplied for assessment.

3.4.2 **PROBLEM**

Location: Start of shared use cycleway and footways.

Summary: Incorrect tactile paving may increase the risk of collisions involving visually impaired pedestrians and cyclists.

The tactile paving is shown as being red on the drawings supplied. Whilst it is recognised that this could be a drafting error, incorrect colour tactile paving could lead to visually impaired pedestrians misinterpreting the entry/exit points to the shared use areas., which could lead cyclist to pedestrian collisions.

RECOMMENDATION

It is recommended that the tactile paving should be buff in accordance with Department for Transport guidelines.

3.4.3 **PROBLEM**

Location: Cycle crossing points at the Tiger crossings.

Summary: Incorrect tactile paving may increase the risk of collisions involving visually impaired pedestrians and cyclists.

Tactile paving is shown as being included in the designs, where this is not required at cycle crossing points. The use of inappropriate tactile paving could lead to visually impaired pedestrians being confused and could lead to could lead cyclist to pedestrian collisions.

RECOMMENDATION

It is recommended that the tactile paving should be removed.

3.5 Road Signs, Carriageway Markings and Lighting

3.5.1 **PROBLEM**

Location: Give way lines at the Tiger crossings.

Summary: Positioning of stop lines could compromise pedestrian safety.

Give way lines appear to be too close to the stud lines on one of the approaches at each crossing. This may cause vehicles to stop at inappropriate locations and may also reduce the intervisibility with pedestrians who are crossing, particularly child pedestrians, which could lead to vehicle to pedestrian or rear end shunt collisions.

RECOMMENDATION

It is recommended that the Give way markings should be set back a minimum of 2.5m from the stud lines.

3.5.2 **PROBLEM**

Location: Westgate approach to pedestrian refuge.

Summary: Inappropriate markings could lead to loss of control collisions.

On approaches to the pedestrian refuge, the hatch markings lead traffic into the island, which may lead to kerb strikes and loss of control collisions.

RECOMMENDATION

It is recommended that the hatch markings should be altered so there is at least 150mm clearance between the road markings and island.

3.5.3 **PROBLEM**

Location: Approaches to the Tiger crossings.

Summary: Inappropriate markings could lead to loss of control or vehicle to pedestrian or cyclist collisions.

On the to the ramped Tiger crossings humped signage is shown rather than humped crossing signage. This could lead to possible driver confusion could lead to loss of control or vehicle to pedestrian or cyclist collisions.

RECOMMENDATION

It is recommended that the appropriate signage is installed showing both the humped crossing and parallel crossing.

3.5.4 **PROBLEM**

Location: At the Tiger crossing on Westgate.

Summary: Inappropriate belisha beacon positions could lead to rear end shunt or vehicle to pedestrian or cyclist collisions.

Belisha beacons are shown as being on the exit sides of the crossing, this could lead to parts of the beacons being masked by waiting pedestrians and reducing the conspicuousness of the crossing. This could lead to possible driver confusion and could lead to rear end shunt or pedestrian or cyclist collisions.

RECOMMENDATION

It is recommended that the belisha beacons should be positioned on the approaches to the crossing

4 ISSUES IDENTIFIED DURING THE ROAD SAFETY AUDIT THAT ARE OUTSIDE THE TERMS OF REFERENCE

4.1 Any issues that the Audit Team wish to bring to the attention of the Client Organisation, which are not covered by the road safety implications of this audit have been included in the following section. These issues could include maintenance items, operational issues, or poor existing provision. It should be understood however, that in raising these issues, the Audit Team do not warrant that a full review of the existing highway environment has been undertaken beyond the scope of the audit.

4.2 The Audit Team had no issues to raise within this section.

5.1 We certify that this audit has been carried out following the principles of GG 119.

Audit Team Leader

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Signed:

Date: 16/11/2020

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Signed:

Date: 16/11/2020

APPENDIX A

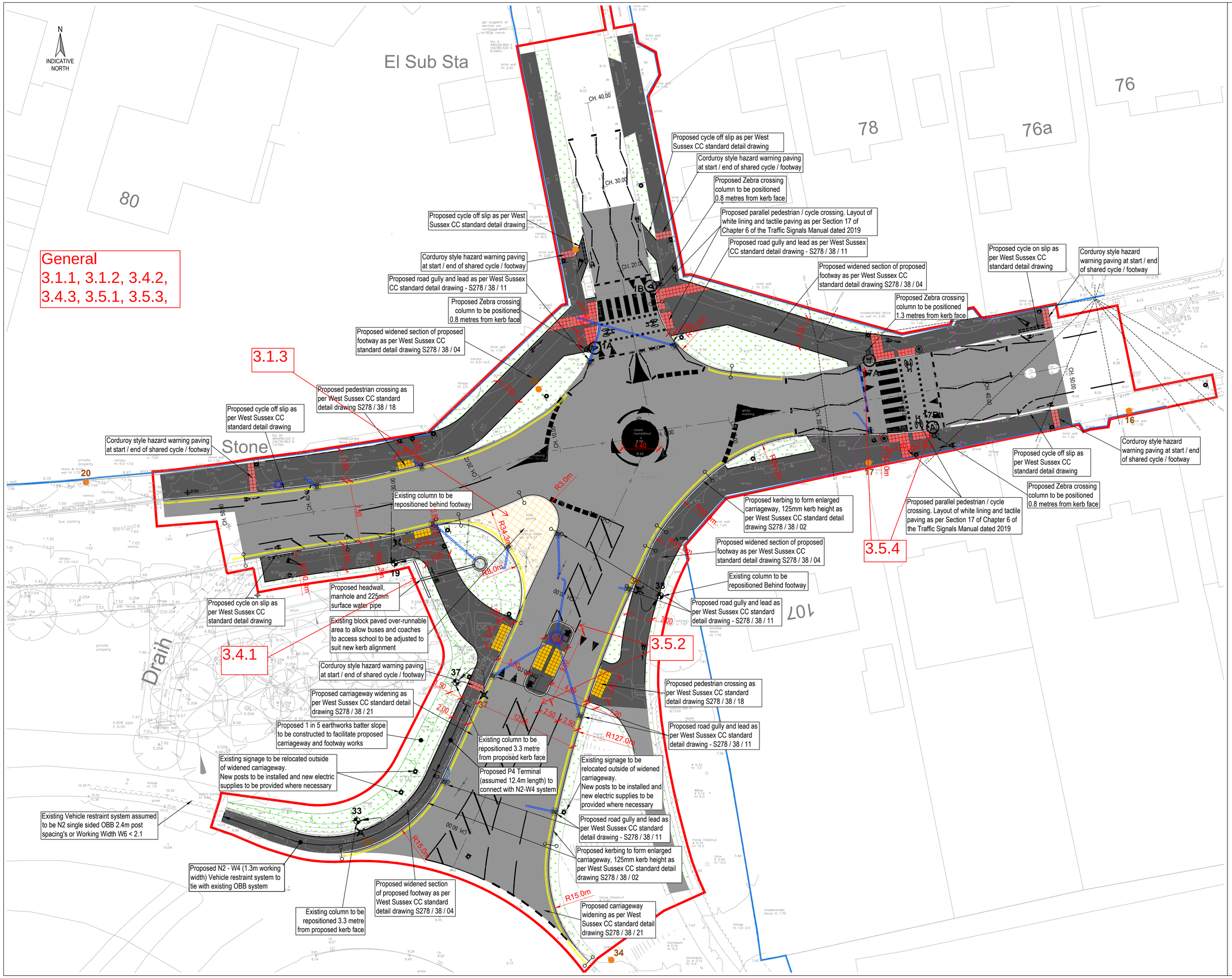
Drawing Number	Title
19183 WGSR 100 P01	GENERAL ARRANGEMENT
19183 WGSR 130 P01	TYPICAL CROSS SECTIONS
19183 WGSR 150 P01	AGREEMENT PLAN
19183 WGSR 200 P01	SITE CLEARANCE
19183 WGSR 500 P01	HIGHWAY DRAINAGE
19183 WGSR 550 P01	EXISTING UTILITIES
19183 WGSR 560 P01	PROPOSED ALTERATIONS TO EXISTING UTILITIES COMBINED UTILITIES
19183 WGSR 561 P01	PROPOSED ALTERATIONS TO EXISTING UTILITIES ELECTRICITY
19183 WGSR 564 P01	PROPOSED ALTERATIONS TO EXISTING UTILITIES TELECOMMUNICATIONS
19183 WGSR 700 P01	KERBING FOOTWAYS AND CARRIAGEWAY
19183 WGSR 1200 P01	WHITE LINING AND SIGNAGE
Orig S106	WESTGATE_SHERBORNE ROAD MINI ROUNDABOUT
SSE-QL756-LD-001-B	SECTION 278 STREET LIGHTING LAYOUT DRAWING

Supporting documentation:

- N/A.

APPENDIX B

Plan attached showing the locations of the problems identified as part of this audit (location numbers refer to paragraph numbers in the report



Key

- Existing Highway Boundary
- S278 Highway Works Boundary
- Proposed carriageway
- Proposed shared use footway/ cycleway
- Existing footways to be resurfaced
- Proposed landscaping areas/grass verge
- Adjusted overrun area
- Proposed buff tactile paving at uncontrolled crossing
- Proposed red tactile paving at controlled crossing

Key

- Proposed street lighting column (Unit Type ID displayed inside symbol. Unit reference number displayed outside symbol).
- Existing lighting column relocated.
- Existing lighting column to be retained.

Rev	Date	Description	By	Apvd
P1	05.11.20	Preliminary issue	JE	GS

PROJECT:
WEST CHICHESTER S278 WORKS

TITLE:
WESTGATE / SHERBORNE ROAD
MINI ROUNDABOUT
GENERAL ARRANGEMENT

CLIENT:
miller homes
Linden HOMES

SCALE@A1:
1:200

PROJECT REF:
19183

DRAWING No: WGSR-100

REV: P1

Revision Referencing
P = Preliminary A = Approval T = Tender C = Construction

Jubb

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