



Road Safety Audit Stage 1/2

Proposed Highway Works

Reading International Business Park

Reading

Date: 25th May 2021

Report produced for: Velocity Transport Planning

Report produced by: M & S Traffic

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Report Title:	Reading International Business Park Road Safety Audit Stage 1/2
Date:	25 th May 2021
Document reference and revision:	VTP/21/3770/12/BS
Prepared by:	M & S Traffic
On behalf of:	Reading Borough Council

Distribution

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1 INTRODUCTION

1.1 This report describes a combined Stage 1/2 Road Safety Audit carried out on a proposed highway works on the access road at Reading International Business Park, Reading, as detailed below:

- ☐ Relocation of a half-inset bus lay-by, incorporating kerbing and bus cage markings, northwest of its existing location.
- ☐ Existing Belisha beacon to be relocated to suit new kerb line.
- ☐ Associated kerbing and paving works.
- ☐ Associated road markings.

The Audit was requested by the design organisation, Velocity Transport Planning, Unit A, Taper Studios, The Leather Market, 120 Weston Street, London SE1 4GS on behalf of Reading Borough Council as the Overseeing Organisation.

1.2 The Audit Team membership were as follows:

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

Martin Morris, PGD, MCIHT, MSoRSA – Audit Team Leader
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1.3 The audit was undertaken following the principles of GG119, The Design Manual for Roads and Bridges. 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 May 2021 and comprised an examination of the documents provided. A joint site visit was undertaken on the 24th May between 12:45 and 13:15. Weather conditions at the time were overcast and the road surface was dry. Traffic flows were low and free flow speeds were low. There were low-level pedestrian movements and no cyclist movements; however, the audit was undertaken in the Covid-19 restriction.

1.5 The report has been compiled, only with regards to the safety implications for road users of the layout presented in the supplied drawings¹. It has not been examined or verified for compliance with any other standards or criteria. This safety 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 safety 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 1/2 AUDIT

3.1 General

3.1.1 No comment.

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: Zebra crossing, north of proposed bus stop.

Summary: Lack of intervisibility could lead to vehicle to pedestrian collisions.

The bus stop is proposed to be relocated to the immediate south of a zebra crossing, where no pedestrian / traffic intervisibility splays have been provided for assessment. A stationary bus at the bus stop could obscure a pedestrian leaving the footway on the western side of the carriageway to cross the road at the zebra crossing. This could lead to vehicle to pedestrian collisions though it is recognised that vehicle speeds are likely to be low.

RECOMMENDATION

It is recommended that the pedestrian / traffic intervisibility splays should be checked, where if insufficient the bus stops may need to be relocated or be fully inset.

Designers Response

Intervisibility splays have been included in the updated drawings showing 11m visibility splays to the east of each crossing (given the road accommodates traffic in one direction).

3.4.2 **PROBLEM**

Location: Zebra crossing, southeast of proposed bus stop.

Summary: Inappropriate pedestrian facilities could lead to vehicle to pedestrian collisions.

There is no stem to the proposed tactile paving, where the presence of the crossing could be missed by blind or partially sighted pedestrians, though this is an existing situation. This could lead to the visually and mobility impaired pedestrians crossing at less safe locations and potential vehicle to pedestrian collisions.

RECOMMENDATION

It is recommended that the tactile paving should extend to the back of the footway in accordance with Department for Transport guidelines.

Designers Response

The tactile paving has been shown without tails such that they are consistent with tactile paving the existing approved crossing points and to avoid confusion.

3.5 **Road Signs, Carriageway Markings and Lighting**

3.5.1 No comment.

4 ISSUES IDENTIFIED DURING THE STAGE 1/2 AUDIT THAT ARE OUTSIDE THE TERMS OF REFERENCE

- 4.1 Safety issues identified during the audit and site inspection that are considered to be outside the Terms of Reference, but which the Audit Team wishes to draw to the attention of the Client Organisation, are set out in this section. It is to be understood that, in raising these issues, the Audit Team in no way warrant that a full review of the highway environment has been undertaken beyond that necessary to undertake the Audit as commissioned.
- 4.2 Throughout the development it was noted that there were no stems to the tactile paving at the zebra crossings, where the presence of the crossings could be missed by blind or partially sighted pedestrians. This could lead to the visually and mobility impaired pedestrians crossing at less safe locations and potential vehicle to pedestrian collisions. It is suggested that the tactile paving should extend to the back of the footway in accordance with Department for Transport guidelines.

5 AUDITOR TEAM STATEMENT

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: 25/05/2021

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Signed:

Date: 25/05/2021

APPENDIX A – List of drawings

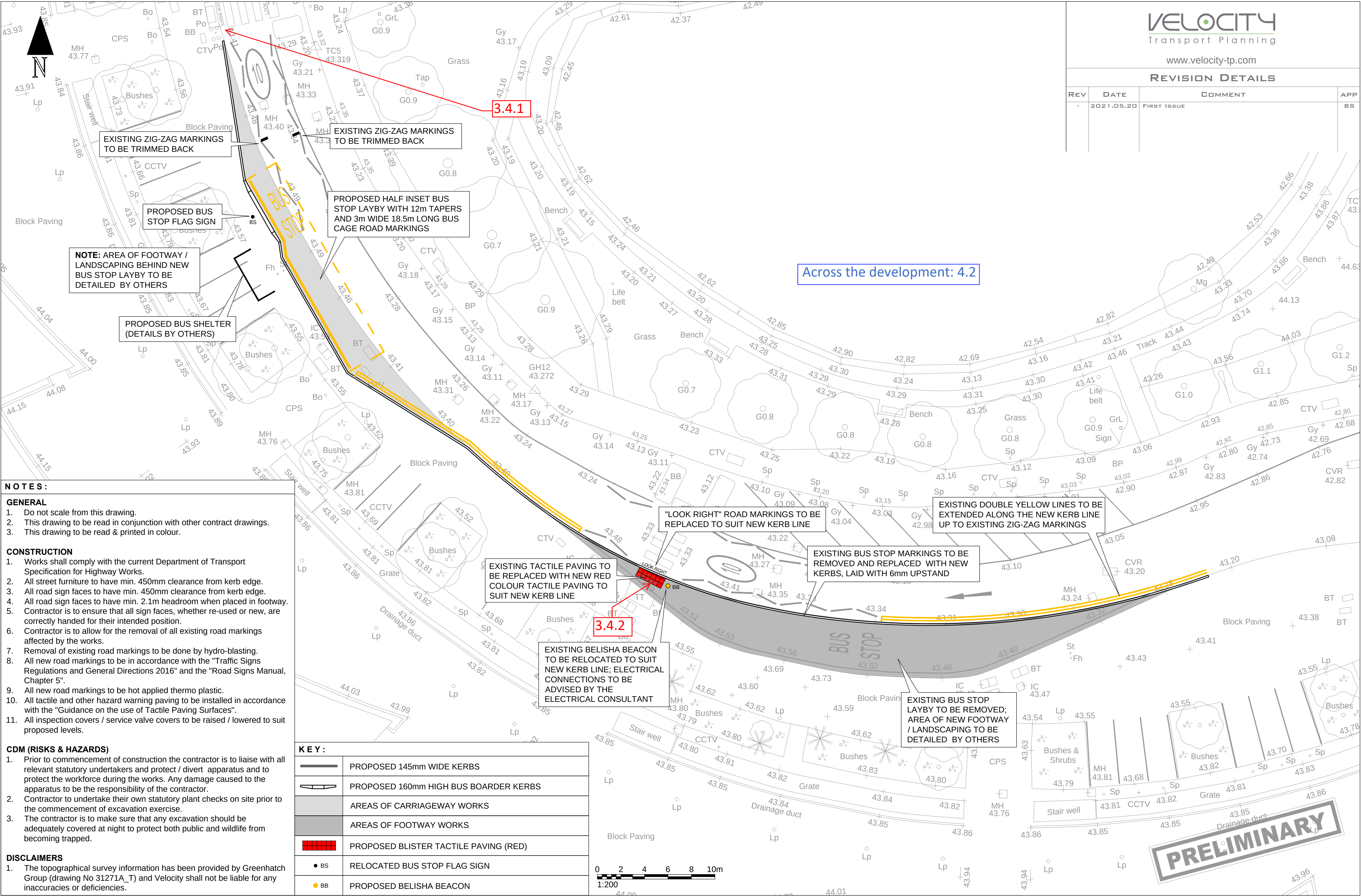
Drawing Number	Drawing Title
3770-1200-100	Proposed Highway Works, General Arrangements
3770-1200-101	Proposed Highway Works, Site Clearance
3770-1200-102	Proposed Highway Works, Setting Out
3770-1200-103	Proposed Highway Works, Road Markings
3770-1200-104	Proposed Highway Works, Construction Areas, Depth & Materials / Kerbing Details
3770-1200-105	Proposed Highway Works, Existing Underground Services
3770-1200-106	Proposed Highway Works, Proposed Spot Levels
3770-1200-110	Proposed Highway Works, Kassel Kerb Standard Detail
3770-1200-120	Proposed Highway Works, Vehicular Swept Paths Analysis
SD/900/2	Pavement Construction Thickness, Major Access Roads and Intermediate Roads (Less than 250 Commercial Vehicles Per Day)
SD/1100/1	Concrete Kerbs and Channels
SD/1100/5	Concrete Pavers and Flags, Signal Controlled Crossing Point

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)



REVISION DETAILS

REV	DATE	COMMENT	APP
1	2021.05.20	FIRST ISSUE	BS

NOTES:

GENERAL

- Do not scale from this drawing.
- This drawing to be read in conjunction with other contract drawings.
- This drawing to be read & printed in colour.

CONSTRUCTION

- Works shall comply with the current Department of Transport Specification for Highway Works.
- All street furniture to have min. 450mm clearance from kerb edge.
- All road sign faces to have min. 450mm clearance from kerb edge.
- All road sign faces to have min. 2.1m headroom when placed in footway.
- Contractor is to ensure that all sign faces, whether re-used or new, are correctly handed for their intended position.
- Contractor is to allow for the removal of all existing road markings affected by the works.
- Removal of existing road markings to be done by hydro-blasting.
- All new road markings to be in accordance with the "Traffic Signs Regulations and General Directions 2016" and the "Road Signs Manual, Chapter 5".
- All new road markings to be hot applied thermo plastic.
- All tactile and other hazard warning paving to be installed in accordance with the "Guidance on the use of Tactile Paving Surfaces".
- All inspection covers / service valve covers to be raised / lowered to suit proposed levels.

CDM (RISKS & HAZARDS)

- Prior to commencement of construction the contractor is to liaise with all relevant statutory undertakers and protect / divert apparatus and to protect the workforce during the works. Any damage caused to the apparatus to be the responsibility of the contractor.
- Contractor to undertake their own statutory plant checks on site prior to the commencement of excavation exercise.
- The contractor is to make sure that any excavation should be adequately covered at night to protect both public and wildlife from becoming trapped.

DISCLAIMERS

- The topographical survey information has been provided by Greenhatch Group (drawing No 31271A_T) and Velocity shall not be liable for any inaccuracies or deficiencies.

KEY:

	PROPOSED 145mm WIDE KERBS
	PROPOSED 160mm HIGH BUS BOARDER KERBS
	AREAS OF CARRIAGEWAY WORKS
	AREAS OF FOOTWAY WORKS
	PROPOSED BLISTER TACTILE PAVING (RED)
	RELOCATED BUS STOP FLAG SIGN
	PROPOSED BELISHA BEACON

0 2 4 6 8 10m
1:200

