

# **Access Park, Gloucester**

Road Safety Audit  
Combined Stage F/1

29 March 2018



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# Issue and Revision Record

Revision	Date	Originator	Checker	Approver	Description
A	29/03/2018				First Issue

**Information class: Standard**

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# 1 Introduction

This report describes a Combined Stage F/1 Road Safety Audit carried out on the proposed access arrangements associated with a new commercial development on the north-western side of Eastern Avenue, Gloucester.

The audit was carried out at the request of David Tucker Associates.

The audit took place at the Bristol office of Mott MacDonald and consisted of a detailed examination of the submitted documentation and drawings listed in **Appendix A**.

It is confirmed that this is a Combined Stage F/1 Road Safety Audit and that the audit was undertaken upon completion of the preliminary design work.

The Road Safety Audit Team as approved by the Project Sponsor, Tom Mais, consisted of:

Tim Blaney	BSc (Hons), CMILT, MCIHT, MSoRSA (Certificate of Competency in Road Safety Audit, July 2012) Audit Team Leader, Mott MacDonald
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Jamie Castle	BEng (Hons), MICE, CEng Audit Team Member, Mott MacDonald
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The Audit Team visited the site of the proposed works together on Tuesday 27<sup>th</sup> March 2018 at 10:30 hrs. During this visit the weather was overcast with occasional rain showers and the road surface damp. Traffic conditions were free flowing. Frequent pedestrian activity along the north-western side of Eastern Avenue between Metz Way and Cancel Close, but no cyclist activity was observed.

This Road Safety Audit was carried out in accordance with The [Chartered] Institution of Highways and Transportation's Road Safety Audit Guidelines and based upon Highways England's Departmental Standard HD19/15. 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.

The comments and suggestions for road safety improvements made in this report seek to address matters that might have an adverse effect on road safety in the context of the chosen design. No attempt has been made to comment on the justification of the scheme. Consequently, the auditors accept no responsibility for the design or construction of the scheme.

All the issues raised in this report are considered to be required for action. The comments contained in the report are based on safety related concerns and as such the design engineer will need to consider carefully how to respond to each of the issues. The Audit Response Report to the audit should be completed by the Design Team and kept on file for future reference.

A Key Plan indicating the location of any identified safety related issues is provided in **Appendix B**.

## Scheme Description

The proposed development site is located on the north-western side of Eastern Avenue between its junctions with Metz Way and York Road and occupies the site of a former distribution centre. It is proposed that the following be constructed:

- 5,574 sqm DIY superstore including garden centre
- 9,155 sqm B1c / B2 / B8 employment
- 40 bed hotel
- 250 sqm pub / restaurant
- 262 sqm drive-thru

Two accesses to the site will be provided; the first to the north will be an all-movement signalised T-junction between Eastern Avenue and Chancel Close. This will form part of a linked junction with Eastern Avenue / York Road to the north and generally takes the form of the layout arrangement consented and agreed with the local highway authority for a previous Costco application on the site (reference: 13/01261/OUT). New controlled pedestrian crossing facilities will be incorporated into the proposed signalised junction.

The second access located to the south will utilise the existing main site access but with amended kerb lines to provide an in-only access served off Eastern Avenue.

A previous Stage 1 Road Safety Audit was undertaken on the signalised junction associated with the Costco planning application. Given the similarities between the two proposals, the Audit Team has reviewed the previous Road Safety Audit Report.



## 2 Items Raised at this Stage 1 Audit

This section describes road safety related issues identified by the Audit Team associated with the scheme as presented in **Appendix A**. A reference key plan is shown in **Appendix B**.

### 2.1 Problem 1.01

*Location: Magnet Trade car park entrance.*

*Summary: Close proximity to signalised junction may result in rear end shunt type collisions.*

The existing access to the Magnet Trade car park is located close to the proposed signalised junction between Chancel Close and Eastern Avenue. Motorists turning into Chancel Close may not anticipate turning vehicles at this location increasing the risk of rear end shunt type collisions.

**Figure 1: Existing access to Magnet Trade car park.**



Source: Mott MacDonald

**Table 1: Problem 1.01 Risk Matrix**

Severity / Frequency	Frequent	Probable	Occasional	Remote
Fatal Injury	Low	Low	Low	Low
Serious Injury	Low	Low	Low	Low
Slight Injury	Low	Low	Average	High
Damage Only	Low	Low	High	Very High

Source: Mott MacDonald

### Recommendation

It is recommended that the existing Magnet Trade car park access is made egress only.

## 2.2 Problem 1.02

*Location: Left turn lane from Chancel Close onto Eastern Avenue.*

*Summary: Carriageway alignment may increase likelihood of collisions.*

The proposed left turn lane from Chancel Close onto Eastern Avenue generally follows the existing alignment. Evidence of previous HGV kerb overrun suggests that this alignment may not be suitable for the large vehicles likely to be associated with the proposed development. Vehicles striking the kerb have an increased risk of loss of control and the loosening of kerb material increases the risk of secondary collisions.

**Figure 2: Evidence of kerb overrun.**



Source: Mott MacDonald

**Table 2: Problem 1.02 Risk Matrix**

Severity / Frequency	Frequent	Probable	Occasional	Remote
Fatal Injury	Low	Low	Low	Low
Serious Injury	Low	Low	Low	Low
Slight Injury	Low	Low	Low	Average
Damage Only	Low	Low	Average	High

Source: Mott MacDonald

### Recommendation

It is recommended that the alignment of the left turn lane is amended to ease the movement of all vehicles. Vehicle tracking should be undertaken to confirm the appropriateness of any design.

### 2.3 Problem 1.03

*Location: Proposed signalised junction between Chancel Close and Eastern Avenue.*

*Summary: Close proximity to York Road junction may lead to ‘see through’ related collisions.*

It is understood that following concerns raised in the Road Safety Audit for the previously agreed signalised junction, it is now proposed that the new junction and the existing junction between Eastern Avenue and York Road will be linked. The close proximity of the two junctions may create a ‘see through’ effect resulting in motorists observing and reacting to the second set of traffic signals increasing the risk of collisions associated with failing to appropriately stop at a signal stop line.

**Figure 3: View looking towards existing Eastern Avenue / York Road junction.**



Source: Mott MacDonald

**Table 3: Problem 1.03 Risk Matrix**

Severity / Frequency	Frequent	Probable	Occasional	Remote
Fatal Injury	Low	Low	Low	Low
Serious Injury	Low	Low	Low	Average
Slight Injury	Low	Average	Average	High
Damage Only	Low	Average	High	Very High

Source: Mott MacDonald

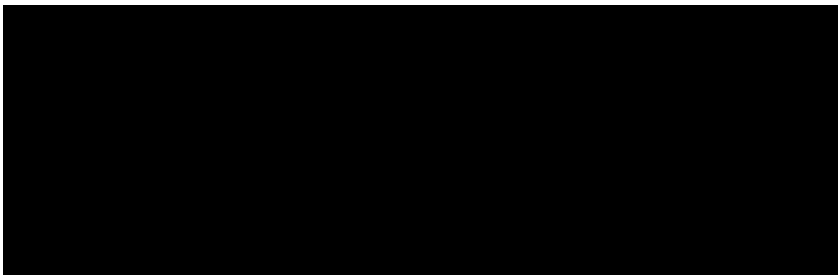
#### Recommendation

It is recommended that, in addition to linking the traffic signal junctions, louvers should be installed on any signal heads that may be wrongly interpreted by approaching motorists.

### 3 Audit Team Statement

We certify that this audit has been carried out in accordance with The [Chartered] Institution of Highways and Transportation and Highways England's Departmental Standard HD19/15

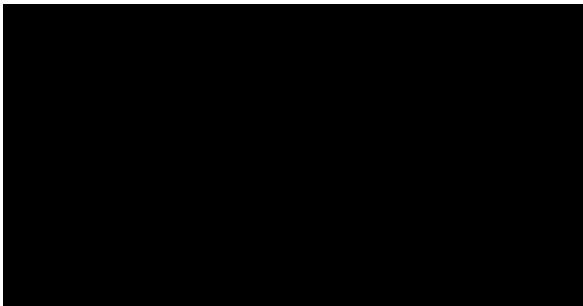
**Road Safety Audit Team Leader**



Date: 29<sup>th</sup> March 2018

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# Appendices

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## A. List of Drawings & Documents Examined

The following drawings and documents were examined as part of this Road Safety Audit.

**Table 4: Drawings**

Drawing Number	Revision	Drawing Title
18325-01	01	Site Location Plan
8437-PL01	-	Site Plan

Source: David Tucker Associates

**Table 5: Documents**

Document Number	Revision	Document Title
18325-02	01	Access Park, Gloucester RSA Brief Issue

Source: David Tucker Associates

**Table 6: Documents provided for information only**

Document Number	Revision	Document Title
316.0004-5001	P1	Proposed Site Access
UM/RSA1/008	1	New Junction Layout RSA 1

Source: David Tucker Associates

# B. Key Plan – Access Park, Gloucester



This plan is the property of Roberts Limbrick Ltd. It is not to be used for any other project without the written consent of Roberts Limbrick Ltd. The information contained herein is confidential and its disclosure to any third party without the prior written consent of Roberts Limbrick Ltd. is strictly prohibited.

No.	Date	Description

**Roberts Limbrick ARCHITECTS**

Project: ACCESS PARK, EASTERN AVENUE, GLOUCESTER

Client: PALOMA CAPITAL

Drawing: Site Layout

Status: Preliminary

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Approved Client: Paloma Capital

Date: 15/03/18  
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 Drawn: JLD  
 Checked: JLD

Project: 8437 PL01

