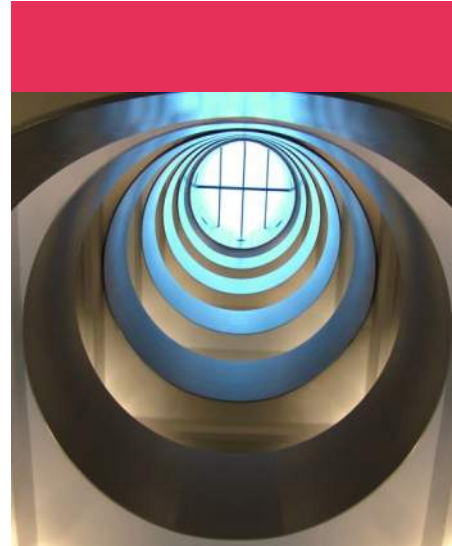


Albert Bridge House, Manchester

Stage 1 Road Safety Audit Response Report

Curtins Ref: 080823-CUR-XX-XX-T-TP-00006
Revision: P01
Issue Date: 13 February 2023

Client Name: Oval Real Estate



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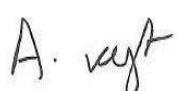


Control Sheet

Rev	Description	Issued by	Checked	Date
P01	First Issue	AV	AV	13 February 2023

This report has been prepared for the sole benefit, use, and information for the client. The liability of Curtins with respect to the information contained in the report will not extend to any third party.

Author	Signature	Date
David Dominguez Senior Transport Planner		13 February 2023

Reviewed	Signature	Date
Alex Vogt BSc (Hons) MSc FCIHT TPP Board Director – Transport Planning		13 February 2023

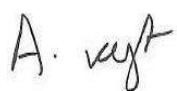
Authorised	Signature	Date
Alex Vogt BSc (Hons) MSc FCIHT TPP Board Director – Transport Planning		13 February 2023



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Appendix A – Stage 1 Road Safety Audit Report

1.0 Introduction

1.1 Background

- 1.1.1 Curtins has been appointed by Oval Real Estate to provide traffic and transport advice in relation to a planning application for a proposed mixed-use development at Albert Bridge House, off St Mary's Parsonage and Bridge Street in Manchester City Centre.
- 1.1.2 A Transport Statement (TS) (Document Reference: **080823-CUR-XX-XX-T-TP-00001**) and Framework Travel Plan (FTP) (Document Reference: **080823-CUR-XX-XX-T-TP-00002**) have been prepared as part of the planning submission.
- 1.1.3 The general scope of works comprises full demolition of the existing Albert Bridge House office building and replacement with a new residential building, office building, and new areas of public realm.
- 1.1.4 A Stage 1 Road Safety Audit of the site access proposals was undertaken in February 2023. This was undertaken by an independent auditor at The Safety Forum. The Audit report is included in **Appendix A**. The Design Team Response to the Audit is set out in this report.

1.2 Structure of the Report

- 1.2.1 Following this introduction, **Section 2** sets out the Design Team Response.

2.0 Design Team Response

Ref.	Location	Summary	Recommendation	Design Team Response
Problem 3.1	Ramped entry to car park	Unclear whether storage capacity is adequate. Vehicles may overhang carriageway. There appears to be signal control and a stop line for vehicles on the access ramp. Whilst the drawings state that the green light will be on default for ingress it is unclear whether there is sufficient storage space for more than one vehicle to enter and wait at the stop line should vehicles be exiting, or whether this scenario would emerge. If this space is insufficient vehicles may overhang the carriageway of Bridge Street in possible conflict with through traffic. Waiting vehicles also may obscure the nearside traffic signal leading to possible junction conflicts, or pedestrians may cross between waiting vehicles, leading to possible conflicts with traffic exiting.	Investigate capacity of this area and examine how arrivals / departures will coincide. Ensure that there is sufficient storage space for anticipated vehicle numbers to wait upon entry to the car park when held up by vehicles exiting.	The storage space between the give way line and the back of footway (adopted highway) is c.10m. This is considered sufficient to accommodate two average cars. The car park can accommodate a total of 24 car parking spaces, of which 16 will be dedicated to office use. On this basis, access will be tidal. The storage space is therefore considered sufficient with space for two cars. This, combined with the reduced number of parking spaces, plus the nature of vehicular movements through the day and the fact that the signal will be on green by default for ingressing vehicles, suggest that the likelihood of vehicles queueing back onto the footway is extremely unlikely.
Problem 3.2	Ramped access	Ramp may be difficult for vehicles to exit. It is unclear the gradient of the ramped access to the development site, or whether there is a level dwell area in advance of the give-way line before vehicles enter Bridge Street. Should vehicles have to set off on a slope they may struggle to accelerate as anticipated or accept gaps in traffic safely. This could lead to emerging type conflicts.	Provide a level dwell area in advance of the give way line for vehicles to set off from.	The storage space before the traffic signal providing access to the basement will be flat, or provided with a very reduced incline (for drainage reasons). On this basis, egressing vehicles will have a relatively flat space to stop before joining the public highway. The ramp itself is provided with a level space, located approximately halfway the straight section.
Problem 3.3	Bridge Street service layby	Visibility to traffic signals on exiting layby. The signal-controlled crossing to the immediate east of the proposed service layby on Bridge Street is to be relocated. The traffic signal layout for this crossing is unclear. Whilst the stop line is shown, no signal heads are indicated. Should the driver of a vehicle exiting the bay not have visibility to a signal head they could fail to heed to pedestrians using the crossing.	Ensure that the location of signal heads are such that they can be seen clearly for vehicles exiting the service bay.	The recommendation is accepted. Location of the signal heads will be dealt with at the detailed design stage.



Ref.	Location	Summary	Recommendation	Design Team Response
Problem 3.4	Exit from development car park	Visibility to / awareness of signal heads may be poor. The proposed egress from the development car park is located very close to the signal controlled junction of Bridge Street and Gartside Street. Drivers of vehicles exiting the development may have poor visibility to / awareness of signal heads at this junction due to their proximity, alignment and the fact that drivers may be concentrating on eastbound traffic approaching on Bridge Street. This could lead to drivers failing to heed the signals and conflicting with other vehicles within the junction or pedestrians using the crossing.	Ensure that visibility to / awareness of the signal heads for drivers approaching the give way line on the car park egress is maximised. This could include visibility over the land to the east of the egress being available. Also traffic signal heads should be aligned towards the egress, and located in positions that offer adequate visibility from the egress.	The recommendation is accepted. Location of the signal heads will be dealt with at the detailed design stage.
Problem 3.5	Bridge Street upon exit from maintenance access route.	Vehicles may turn right. Vehicles leaving the maintenance route may try to turn right, either through the right turn access in the central reserve, or through the signal controlled junction against opposing traffic. These movements would be unexpected and could lead to conflict with traffic generally.	Install left turn only signs for traffic leaving the maintenance route.	The recommendation is accepted. Provision of vertical signage will be dealt with at the detailed design stage.

Table 2.1 – Design Team Response

Appendix A – Stage 1 Road Safety Audit Report

ALBERT BRIDGE HOUSE, MANCHESTER

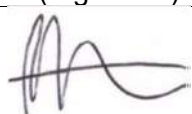
PROPOSED DEVELOPMENT ACCESS ARRANGEMENTS

Stage 1 Road Safety Audit

February 2023

RW-AJ-23-3985-RSA1

Report title:	Albert Bridge House, Manchester. Proposed Development Access Arrangements. RSA 1
Date:	08/02/23
Document reference and revision:	RW-AJ-23-3985-RSA1
Prepared by:	The Safety Forum
On behalf of:	Manchester City Council

Revision Status	Prepared by: (Name)	Checked by: (Name)	Approved by: (Signature)	Date Approved:
Original	R Westhead	A Jan		08/02/23
Designer's Response				
Authority's Response				
Audit Response				

Client:	
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Merchant Exchange 17-19 Whitworth Street West Manchester M1 5WG	PO Box 831 Godalming Surrey GU7 9HT
	Date: 08/02/23

APPENDIX A Location Plan

1.0 INTRODUCTION

1.1 This report results from a Stage 1 Road Safety Audit (RSA) carried out on the proposed access arrangements associated with a new mixed use (residential / office) development on the site of the current Albert Bridge House on Bridge Street, Manchester.

1.2 The highway proposals include:

- *A new access and ramp down to a basement car park from Bridge Street;*
- *A new loading bay on Bridge Street for refuse and servicing of the residential plot;*
- *A new shared surface access into an area of public realm from Bridge Street to provide fire and maintenance access only;*
- *A new shared surface access to a sub-station for the commercial building; and*
- *A new loading bay on St Mary's Parsonage to accommodate refuse and servicing of the commercial block.*

**Taken from RSA Brief.*

1.3 The Stage 1 RSA was carried out at the request of Curtins Consulting.

1.4 The Road Safety Audit Brief was supplied by Curtins Consulting. The overseeing organisation is Manchester City Council. The RSA Brief was accepted by the Audit Team as adequate to complete the RSA.

1.5 The Audit was carried out on 6th February 2023 by consultants working on behalf of The Safety Forum Limited. The Audit Team, which is established from The Safety Forum Ltd and independent of the project design team, has had no involvement with the project.

The Auditors were:

R Westhead – Team Leader (BSc (Hons), MSoRSA, CoC)

A Jan – Team Member (MSc (Eng), BSc (Hons), MCIHT, CoC)

-
- 1.6 The report has been prepared in accordance with General Principles and Scheme Governance General Information, GG 119, Road Safety Audit (Formerly HD 19/15).
- 1.7 The Audit consisted of a desktop study and a site visit. The site visit was carried out on 6th February 2023, between 16:30 and 17:30 hours by all members of the Audit Team together. The weather was dry and fine and the road surface was dry. Traffic conditions were busy.
- 1.8 Issues relating to the health & safety of operatives constructing, operating or maintaining the highway are not covered by Road Safety Audit. Only issues relating to the design and construction of facilities for highway maintenance that may potentially contribute to a Road Safety Matter are considered by the Road Safety Audit process.

Road Safety Audit is not a technical check that the design conforms to Standards and/or best practice guidance. Design Organisations are responsible for ensuring that their designs have been subjected to the appropriate design reviews (including, where applicable, Walking, Cycling & Horse Riding Assessment & Review) prior to Road Safety Audit.

Road Safety Audit is not a check that the scheme has been constructed in accordance with the design.

Whilst reference is made to certain design standards, where safety may be compromised by a reduction in standard, this report is not intended to provide a design check. The Auditors have only reported on 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 or the appropriateness of the design. Consequently, the Auditors accept no responsibility for the design or construction of the scheme.

- 1.9 The recommendations in this report are aimed at addressing the road safety problems; however there may be other alternative acceptable ways to overcome a specific problem, when other practical issues are considered. The recommendations contained herein do not absolve the Designer of his/her responsibilities.
- 1.10 The Auditors would be pleased to discuss the acceptability of alternative solutions to problems identified during the Audit, and would encourage the Designer to consult them on this matter.
- 1.11 The Overseeing Organisation response to the RSA should be formally recorded and reported to the Designer and the RSA Team so that a record of the Audit process is contained in the *As Built* design pack to be provided and retained by the Overseeing Organisation on final completion.
- 1.12 All problems identified in this Road Safety Audit Report are indicated on a location plan in Appendix A

2.0 ITEMS CONSIDERED

- 2.1 The Road Safety Audit was undertaken on the scheme detailed in the following documentation.

Drawing No.	Rev	Title
-	-	Road Safety Audit Brief
80823-CUR-XX-XX-T-TP-00001	P02	Albert Bridge House, Manchester, Transport Statement
80823 CUR XX 00 D TP 75002	P01	PROPOSED ACCESS ARRANGEMENT
SWEPT PATH ANALYSIS 11.2m REFUSE VEHICLE	P04	80823 CUR XX 00 D TP 05001
SWEPT PATH ANALYSIS LARGE CAR GROUND FLOOR	P03	80823 CUR XX 00 D TP 05002
SWEPT PATH ANALYSIS 7.7m FIRE TENDER	P03	80823 CUR XX 00 D TP 05003
SWEPT PATH ANALYSIS LARGE CAR BASEMENT CAR PARK	P04	80823 CUR XX 00 D TP 05004
SWEPT PATH ANALYSIS 12m RIGID HGV	P02	80823 CUR XX 00 D TP 05005

- 2.2 No departure from standards or other information was submitted to the Audit Team.

3.0 MATTERS ARISING FROM THIS STAGE 1 AUDIT.

3.1 PROBLEM

LOCATION: Ramped entry to car park.

SUMMARY: Unclear whether storage capacity is adequate. Vehicles may overhang carriageway.

There appears to be signal control and a stop line for vehicles on the access ramp. Whilst the drawings state that the green light will be on default for ingress it is unclear whether there is sufficient storage space for more than one vehicle to enter and wait at the stop line should vehicles be exiting, or whether this scenario would emerge.

If this space is insufficient vehicles may overhang the carriageway of Bridge Street in possible conflict with through traffic. Waiting vehicles also may obscure the nearside traffic signal leading to possible junction conflicts, or pedestrians may cross between waiting vehicles, leading to possible conflicts with traffic exiting.

RECOMMENDATION

Investigate capacity of this area and examine how arrivals / departures will coincide. Ensure that there is sufficient storage space for anticipated vehicle numbers to wait upon entry to the car park when held up by vehicles exiting.

3.2 PROBLEM

LOCATION: Ramped access.

SUMMARY: Ramp may be difficult for vehicles to exit.

It is unclear the gradient of the ramped access to the development site, or whether there is a level dwell area in advance of the give-way line before vehicles enter Bridge Street. Should vehicles have to set off on a slope they may struggle to accelerate as anticipated or accept gaps in traffic safely. This could lead to emerging type conflicts.

RECOMMENDATION

Provide a level dwell area in advance of the give way line for vehicles to set off from.

3.3 PROBLEM

LOCATION: Bridge Street service layby.

SUMMARY: Visibility to traffic signals on exiting layby.

The signal-controlled crossing to the immediate east of the proposed service layby on Bridge Street is to be relocated. The traffic signal layout for this crossing is unclear. Whilst the stop line is shown, no signal heads are indicated. Should the driver of a vehicle exiting the bay not have visibility to a signal head they could fail to heed to pedestrians using the crossing.

RECOMMENDATION

Ensure that the location of signal heads are such that they can be seen clearly for vehicles exiting the service bay.

3.4 PROBLEM

LOCATION: Exit from development car park.

SUMMARY: Visibility to / awareness of signal heads may be poor.

The proposed egress from the development car park is located very close to the signal controlled junction of Bridge Street and Gartside Street. Drivers of vehicles exiting the development may have poor visibility to / awareness of signal heads at this junction due to their proximity, alignment and the fact that drivers may be concentrating on eastbound traffic approaching on Bridge Street. This could lead to drivers failing to heed the signals and conflicting with other vehicles within the junction or pedestrians using the crossing.

RECOMMENDATION

Ensure that visibility to / awareness of the signal heads for drivers approaching the give way line on the car park egress is maximised. This could include visibility over the land to the east of the egress being available. Also traffic signal heads should be aligned towards the egress, and located in positions that offer adequate visibility from the egress.

3.5 PROBLEM

LOCATION: Bridge Street upon exit from maintenance access route.

SUMMARY: Vehicles may turn right.

Vehicles leaving the maintenance route may try to turn right, either through the right turn access in the central reserve, or through the signal controlled junction against

opposing traffic. These movements would be unexpected and could lead to conflict with traffic generally.

RECOMMENDATION

Install left turn only signs for traffic leaving the maintenance route.

4.0 AUDIT TEAM STATEMENT

4.1 We certify that this audit has been carried out in accordance with GG 119.

AUDIT TEAM LEADER

Name: R Westhead
Position: Director
The Safety Forum Ltd
PO Box 831
Godalming
Surrey
GU7 9HT

Signed:

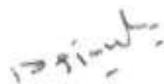


Date: 8 February 2023

AUDIT TEAM MEMBER

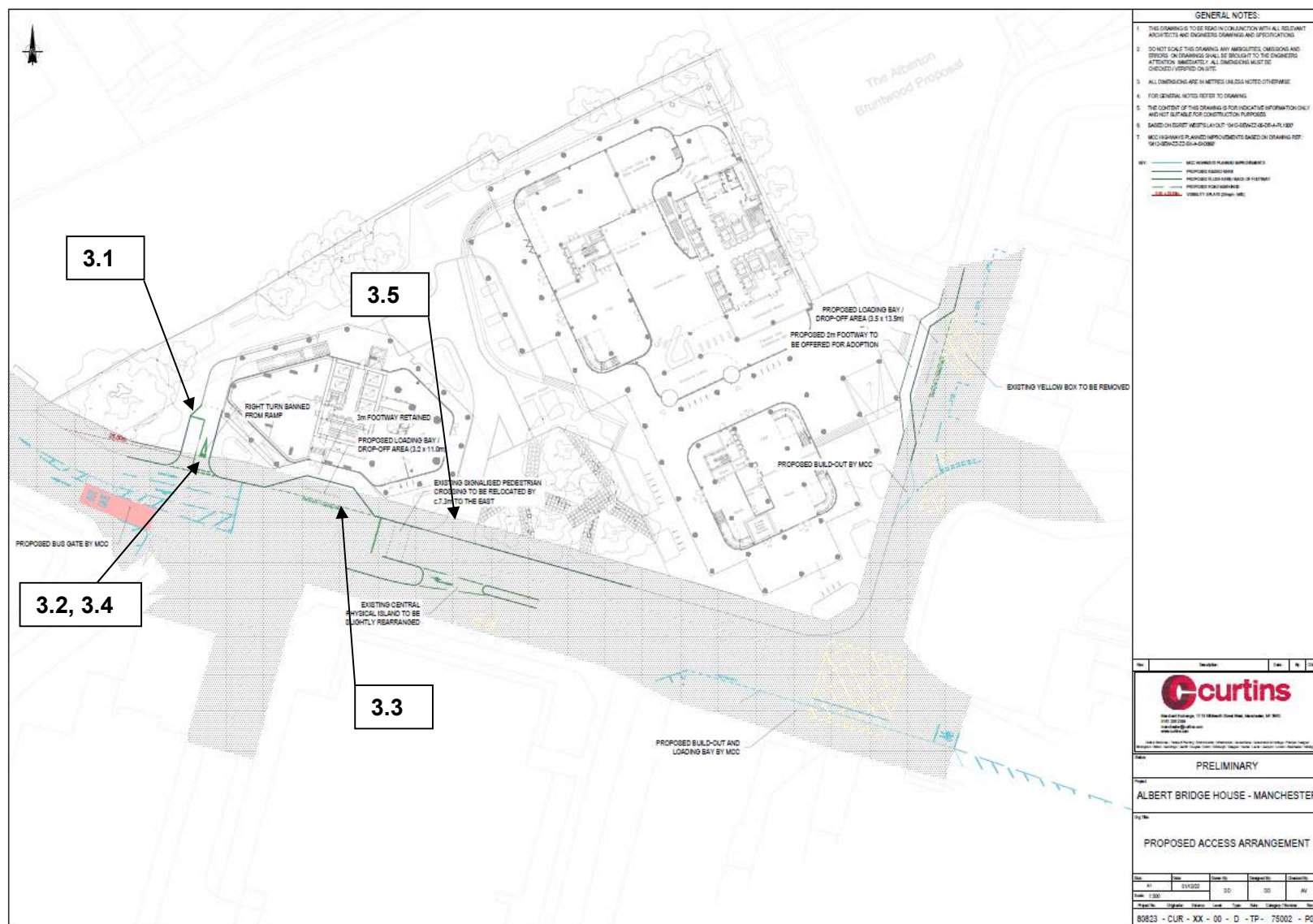
Name: A Jan
Position: Road Safety Consultant
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PO Box 831
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Signed:



Date: 8 February 2023

APPENDIX A: LOCATION PLAN



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