
**LAND NORTHEAST OF M1
JUNCTION 22,
MARKFIELD,
LEICESTERSHIRE**

**WHITWICK ROAD/A50
WESTBOUND SLIP ROAD**

STAGE 1

ROAD SAFETY AUDIT REPORT

REQUESTED BY:

HUB TRANSPORT PLANNING

SEPTEMBER 2025



RKS
Associates

Project: Land Northeast of M1 Junction 22, Markfield, Leicestershire
Whitwick Road/A50 Westbound Slip Road

Client: Hub Transport Planning

Document: Stage 1 Road Safety Audit

RKS Associates Ref: VRP2015-03- RSA 1

Issue date: 4th September 2025

Status: Final

Authorised by: VP/BN

© Copyright RKS Associates 2025



RKS
Associates



Contents

1	Introduction	1
2	Issues Identified During Stage 1 Road Safety Audit	4
3	Audit Team Statement	6

Appendices

Appendix A:	Location of Problems Identified During Stage 1 Road Safety Audit
Appendix B:	Road Safety Audit Decision Log

1 INTRODUCTION

- 1.1 This report results from a Stage 1 Road Safety Audit carried out on the highway works associated with a proposed Industria/Storage (B2/B8) development on land located to the northeast of M1 Junction 22, Markfield in Leicestershire.
- 1.2 The proposed development provides a total of 65,000m² Gross Internal Floor Area (GFA) arranged as six units with accesses taken from the A50 via an on and off slip road arrangement and a separate egress only on to Whitwick Road. The proposed site layout and respective accesses are shown in Figure 1.

Figure 1: Proposed Site Layout Master Plan



- 1.3 The highway works subject to this Stage 1 Road Safety Audit include amendments to the westbound slip road onto the A50 and improvements to the pedestrian crossing facilities across Whitwick Road and the A50 westbound off slip.
- 1.4 The westbound slip road onto the A50 from Whitwick Road is a two lane one way westbound carriageway. The slip road is aligned in an east to west downhill gradient, it is unlit with grass verges along both sides of the carriageway.
- 1.5 Hub Transport Planning has supplied the following information upon which this Stage 1 RSA is based:
- UMC Architects Drawing Number: 24473-UMC-ZZZZ-SI-DR-A 0112 Revision P02 – Site Layout Plan;
 - Traffic Survey data undertaken in May 2025 on the local highway network;
 - Hub Transport Planning Drawing Numbers:
 - T22523-003 Revision D – Proposed Whitwick Road/A50 Westbound Slip Road Mitigation.

1.6 The main parties to this Road Safety Audit include the following:

Road Safety Audit Team Leader	Vimal Patel BEng (Hons), GMICE, FIHE, NH Cert Comp
Road Safety Audit Team Member	Beth Newiss MCIHT, MSoRSA, NH Cert Comp
Local Highway Authority	Leicestershire County Council
Design Organisation	Hub Transport Planning

1.7 The Audit was undertaken following examination of the submitted documents, including reference to a site visit undertaken on Thursday 21st August 2025 between the hours of 10am and 1pm. The weather during the site inspection was sunny and the carriageway dry with moderate traffic flows and no pedestrian and cycle flows were observed along the A50 and lower traffic and no pedestrian and cycle flows were observed along Whitwick Road.

Terms of Reference

1.8 The Audit Team is independent of the project design team and has no other involvement with the project. This Stage 1 RSA has been undertaken in accordance with the relevant sections of GG-119, part of the Design Manual for Roads and Bridges (DMRB).

1.9 The Safety Audit Team has examined only matters relating to road safety implications of the scheme and has not verified compliance of the design to any other criteria. The Audit Team has not been made aware of any Departures from Standard or any previous Road Safety Audits conducted on the highway works.

1.10 All of the problems identified in this report are considered by the Audit Team to require action in order to improve the safety of the scheme and to minimise accident occurrence for all users. The location of the problems identified in this Safety Audit is shown in **Appendix A** where the reference numbers relate to the problems identified in this report.

1.11 The recommendations in this report are aimed at addressing the identified 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. 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.

1.12 The LHA 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 Local Highway Authority on completion.

1.13 For ease the Road Safety Audit Decision Log template is included in **Appendix B**. This enables the Designers and Overseeing Organisations Response to the Audit to be documented along with an agreed RSA Action.

Collision Data

- 1.14** Publicly available Personal Injury Collision (PIC) information obtained from the Crashmap UK website (www.crashmap.co.uk) for the 5-year period up to December 2023 has been reviewed within the vicinity of the highway works. The collision data indicates that a total of 5 collisions have occurred on the wider highway network, however no collisions have occurred on the A50 westbound slip road.

Trip Generation/Traffic Flow Data

- 1.15** The Design Engineers Hub Transport Planning have provided details of the likely trip generation associated with the proposed development via an email. The trip generation assessment indicates that the proposed development is likely to generate 531 and 348 two-way vehicle trips during the AM and PM peak hour periods respectively.

2 ISSUES IDENTIFIED DURING STAGE 1 ROAD SAFETY AUDIT

2.1 **Problem:**

Summary: Potential risk of collisions associated with poor drainage

Location: *General.*

No details have been provided in respect of surface water drainage or other services, and it is therefore not possible to ascertain whether there will be any safety implications. The absence of surface water drainage may result in the collection of surface water which could increase the risk of loss of control collisions.

Recommendation:

Ensure that the detailed design incorporates surface water drainage to mitigate localised flooding/ponding.

2.2 **Problem:**

Summary: Potential risk of vehicle collisions associated with obstruction to visibility

Location: *A50 westbound off slip entry onto A50*

Observations during the site inspection noted that vegetation between the A50 westbound off slip and the A50 where vehicles will merge onto the A50 may be restricted by vegetation. Poor visibility for vehicles attempting to merge onto the A50 may increase the risk of sideswipe collisions between vehicles inadvertently merging onto the A50 and A50 westbound through traffic.

Recommendation:

Ensure that Vegetation between the A50 westbound off slip and the A50 is cut back and regularly maintained.

2.3 **Problem:**

Summary: Potential risk of loss of control collisions associated with unclear layout

Location: *Whitwick Road right turn onto A50 westbound off slip*

The proposed hatch markings used to assist vehicles turning right from Whitwick Road right turn onto A50 westbound off slip results in a poor alignment that may encourage large vehicles to overrun the verge. Consequently, this may increase the risk of loss of control collisions particularly high sided vehicles as they negotiate the right turn manoeuvre onto the A50 westbound on-slip.

Recommendation:

Review and amend the hatch markings on the right turn entry to the A50 westbound on-slip to provide a smoother transition and mitigate the risk of vehicles overrunning the verge.

2.4 Problem:

Summary: Potential risk of pedestrians struck by collisions associated with poor visibility

Location: *Proposed pedestrian crossing across A50 westbound off-slip*

No details in relation to the visibility splays to and from the proposed tactile landings at the uncontrolled crossing facility across A50 westbound off slip have been provided. Poor visibility for pedestrians using the crossing may encourage them to step out onto the carriageway to observe oncoming vehicles which may increase the risk of them being struck by turning vehicles.

Recommendation:

Review the layout to ensure visibility splays to and from the tactile landings are provided any obstructions in the visibility should be removed.

2.5 Problem:

Summary: Potential risk of pedestrians struck by vehicles

Location: *Proposed pedestrian crossing across A50 westbound off-slip*

There is concern that the relatively high vehicle speeds on the approach to the proposed crossing, combined with the longer crossing distance for pedestrians, may increase the likelihood of pedestrians being struck by passing traffic.

Recommendation:

Measures to reduce vehicle approach speeds and to minimise pedestrian crossing distance are considered within the detailed design. This could include features such as carriageway narrowing, pedestrian refuges, or alternative crossing types that provide greater protection for vulnerable users.



3 AUDIT TEAM STATEMENT

- 3.1** We certify that this audit has been carried out in accordance with GG-119 of Design Manual for Roads & Bridges Volume 5 Section 2 - Road Safety Audits. Its sole purpose being to identify features of the scheme that could be removed or modified to improve safety. No member of the Audit Team has been involved in the scheme design.

Audit Team Leader

Vimal Patel
BEng (Hons), GMICE, FIHE, NH Cert Comp

Signed:

Date: 4th September 2025

Audit Team Member

Beth Newiss
MCIHT, MSoRSA, NH Cert Comp

Signed:

Date: 4th September 2025



Appendix A



Appendix B



Issue N°	RSA Problem	RSA Recommendation	Design Organisation Response	Overseeing Organisation Response	Agreed RSA Action
2.1	No details have been provided in respect of surface water drainage or other services, and it is therefore not possible to ascertain whether there will be any safety implications. The absence of surface water drainage may result in the collection of surface water which could increase the risk of loss of control collisions.	Ensure that the detailed design incorporates surface water drainage to mitigate localised flooding/ponding.	Recommendation Accepted. Drainage will be dealt with as part of the detailed design of the scheme.		
2.2	Observations during the site inspection noted that vegetation between the A50 westbound off slip and the A50 where vehicles will merge onto the A50 may be restricted by vegetation. Poor visibility for vehicles attempting to merge onto the A50 may increase the risk of sideswipe collisions between vehicles inadvertently merging onto the A50 and A50 westbound through traffic.	Ensure that Vegetation between the A50 westbound off slip and the A50 is cut back and regularly maintained.	Recommendation Accepted. Vegetation will be cut back and thereafter maintained by the highway authority within the extent of the adopted highway.		
2.3	The proposed hatch markings used to assist vehicles turning right from Whitwick Road right turn onto A50 westbound off slip results in a poor alignment that may encourage large vehicles to overrun the verge. Consequently, this may increase the risk of loss of control collisions particularly high sided vehicles as they negotiate the right turn manoeuvre onto the A50 westbound on-slip.	Review and amend the hatch markings on the right turn entry to the A50 westbound on-slip to provide a smoother transition and mitigate the risk of vehicles overrunning the verge.	Recommendation Accepted. Drawing T22523.003 has been updated (rev E) to provide the smoother transition recommended.		



2.4	No details in relation to the visibility splays to and from the proposed tactile landings at the uncontrolled crossing facility across A50 westbound off slip have been provided. Poor visibility for pedestrians using the crossing may encourage them to step out onto the carriageway to observe oncoming vehicles which may increase the risk of them being struck by turning vehicles.	Review the layout to ensure visibility splays to and from the tactile landings are provided any obstructions in the visibility should be removed.	Recommendation Not Accepted. Drawing T22523.003 has been updated (rev E) to realign the pedestrian crossing location back to the existing location, but to provide shorter crossing distances by providing a refuge facility in the centre of the junction.		
2.5	There is concern that the relatively high vehicle speeds on the approach to the proposed crossing, combined with the longer crossing distance for pedestrians, may increase the likelihood of pedestrians being struck by passing traffic.	Measures to reduce vehicle approach speeds and to minimise pedestrian crossing distance are considered within the detailed design. This could include features such as carriageway narrowing, pedestrian refuges, or alternative crossing types that provide greater protection for vulnerable users.	Recommendation Accepted. As noted above, drawing T22523.003 has been updated (rev E) to realign the pedestrian crossing location back to the existing location, and provide shorter crossing distances by providing a refuge facility in the centre of the junction.		