

Tritax Symmetry (Hinckley) Limited

HINCKLEY NATIONAL RAIL FREIGHT INTERCHANGE

The Hinckley National Rail Freight Interchange Development Consent Order

Project reference TR050007

Appendix 14 - Gibbet Hill Mitigation Road Safety Audit Stage 1

Revision: 01

December 2024

Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009
Regulation 5(2)(q)

TRANSPORT AND INFRASTRUCTURE DESIGN

Tritax Symmetry (Hinckley) Ltd.

Hinckley National Rail Freight
Interchange

Stage 1 Road Safety Audit
RESPONSE REPORT GIBBET HILL

DOCUMENT ISSUE RECORD

Report Title:	Hinckley National Rail Freight Interchange – Stage 1 RSA Gibbet Hill
Document Number:	HRF-BWB-HGN-RSA-RP-CH-0007
Prepared By:	BWB Consulting Ltd
Overseeing Organisation:	National Highways
BWB Reference:	NTT2814

Revision	Date of Issue	Status	Author:	Checked:	Approved
P01	06 December 2024	S4	Sam Carter CEng MICE	Simon Hilditch CEng MICE MCIHT	Sam Carter CEng MICE

Notice

This document has been prepared for the sole use of the Client in accordance with the terms of the appointment under which it was produced. BWB Consulting Limited accepts no responsibility for any use of or reliance on the contents of this document by any third party. No part of this document shall be copied or reproduced in any form without the prior written permission of BWB.



CONTENTS

- 1. INTRODUCTION..... 3
 - Objectives 3
 - Key Personnel 3
 - Summary of Findings 3
- 2. ITEMS RAISED AT THE STAGE 1 AUDIT: DECISION LOG 4
- 3. DESIGN ORGANISATION AND OVERSEEING ORGANISATION STATEMENTS 9
 - Design Organisation Statement..... 9

1. INTRODUCTION

Objectives

- 1.1. This report comprises a Response Report undertaken with reference to the Stage 1 Road Safety Audit (RSA) report by BWB Consulting (reference HRFI-BWB-GEN-RSA-RP-TR-004_Gibbet Hill RSA1) relating to the theoretical mitigation measures at the Gibbet Hill roundabout on the A5 associated with the Hinckley National Rail Freight Interchange (HNRFI).
- 1.2. The RSA was conducted independently of the design team by BWB's Road Safety Audit team.
- 1.3. The purpose of the Audit is as described in the Audit Report.
- 1.4. This Response Report has been based on the template in DMRB standard GG 119.
- 1.5. The text of the Audit report has been copied into this report for ease of reference. Locations of the items raised are as given in the Audit.

Key Personnel

- 1.6. The following key personnel have been involved in these Road Safety Audits:

	Name	Key Contact	Role	Contact Details
RSA Team	BWB Consulting	Naomi Cook	Audit Team Leader	██████████@bwbconsulting.com
Design Organisation	BWB Consulting Ltd	Sam Carter	Operations Director	██████████@bwbconsulting.com ██████████

Summary of Findings

- 1.7. The audit raised five points and the designer has agreed with all of the recommendations, set out their proposed actions and made changes to the design accordingly.

2. ITEMS RAISED AT THE STAGE 1 AUDIT: DECISION LOG

RSA Ref.	RSA Problem and Recommendation	Design organisation response	Auditor Response	Agreed RSA action
2.1	<p>Location: A426 northeast bound entry Summary: Potential elevated entry paths due to the relaxed kerb radius leading to loss of control</p> <p>The audit team is concerned with the proposed nearside kerb line on the A426 entry. The increased entry path radius is likely to impact on the entry speeds of vehicles using the roundabout. Reducing the entry path deflection leads to elevated vehicular speeds on entry which in turn could lead to loss of control collisions at the roundabout.</p> <p>Recommendation Review the proposed deflection in the nearside lane to ensure that the proposed entry path radius is not detrimental to entry speeds.</p>	<p>Agree with RSA Recommendation: Yes</p> <p>The entry path deflection is shown on the revised drawings and is compliant with CD 116 at < 100m.</p>		

RSA Ref.	RSA Problem and Recommendation	Design organisation response	Auditor Response	Agreed RSA action
2.2	<p>Location: General to the scheme</p> <p>Summary: Potential loss of control resulting from ineffective drainage and associated ponding within the carriageway.</p> <p>There are various locations around the roundabout where there is significant vegetation and debris established in the channel lines of the carriageway which indicates likely ineffective drainage. If the drainage at and around the junction does not operate effectively there is an increased risk of surface water ponding which in turn could lead to loss of traction and loss of control, particularly in periods of freezing weather.</p> <p>Recommendation</p> <p>Review the drainage at the junction and revise as part of the scheme.</p>	<p>Agree with RSA Recommendation: Yes</p> <p>The drainage will be reviewed in detail at the detailed design stage. Additional detail has been added to the drawings to set out the requirements for additional filter drainage and kerb drainage.</p>		

RSA Ref.	RSA Problem and Recommendation	Design organisation response	Auditor Response	Agreed RSA action
2.3	<p>Location: General to the scheme</p> <p>Summary: Potential collisions associated with insufficient circulatory width</p> <p>The formalisation of the two lane entries from A5 northbound, A426 eastbound and Gibbet Lane is likely to increase the occurrence of vehicles, particularly HGVs, using the circulatory carriageway two abreast. While the swept path drawings supplied to the RSA team suggest that this is achievable, site observations showed that there is evidence of significant overrun of the central island kerb line (on both the west and east sides) suggesting that there is insufficient width on the circulatory to safely accommodate two HGVs. This is compounded by the lack of road markings on the roundabout circulatory and all exits from the roundabout are single lane. Collectively this could lead to an increase in collisions on the circulatory, and side swipe collisions at the exits as two vehicles attempt to leave the roundabout at the same time.</p> <p>There is also a risk of an increase in HGVs overrunning the verge and central island bringing mud onto the carriageway which is particularly hazardous for powered two wheelers.</p> <p>Recommendation</p> <p>Review the swept path at the junction taking into consideration what could be happening in reality at present at the roundabout and if necessary, revise the kerb lines around the circulatory to ensure sufficient width is provided as part of the scheme.</p>	<p>Agree with RSA Recommendation: Yes</p> <p>Swept paths have been rerun and the roundabout circulatory carriageway has been widened in a number of places where vehicle overrunning is a risk in order to provide sufficient space between swept paths. New road markings on the circulatory carriageway are proposed to guide vehicles to the correct destination and mitigate the risk of vehicle overrunning or conflict.</p>		

RSA Ref.	RSA Problem and Recommendation	Design organisation response	Auditor Response	Agreed RSA action
2.4	<p>Location: General to the scheme Summary: Potential collisions resulting from a lack of road markings</p> <p>There is a general lack of road markings on the approaches to and exits from the roundabout. Increasing the number of entry lanes in turn increases the number of vehicles on the negotiating the roundabout at any one time. Many of the users will be unfamiliar with the area and the lack of road markings could lead to incorrect positioning resulting in late lane changes or hesitation which in turn could result in collisions.</p> <p>Recommendation Provide sufficient road markings on approach to, exits from and on the circulatory of the roundabout.</p>	<p>Agree with RSA Recommendation: Yes</p> <p>New road markings have been proposed throughout the junction to ensure that vehicles are in the correct lane and to mitigate the risk of conflict.</p>		


RSA Ref.	RSA Problem and Recommendation	Design organisation response	Auditor Response	Agreed RSA action
2.5	<p>Location: Areas of carriageway widening – A426 and A5 northbound entry</p> <p>Summary: Potential collisions with street furniture</p> <p>The localised widening and formalisation of two lane entries at the A426 and A5 reduces the offsets to street furniture and assets located within the nearside verges. At the A5 northbound entry, it was also noted that there is a level change towards the back of the verge to the land adjacent. In the event of a collision in these locations there is an increased risk of an errant vehicle colliding with street furniture or entering the adjacent field all of which will result in increased severity of injuries to vehicle occupants.</p> <p>Recommendation</p> <p>Assess the need for relocation of street furniture or the need for protection using VRS, by undertaking a RRRAP assessment.</p>	<p>Agree with RSA Recommendation: Yes</p> <p>Additional detail has been added to the drawings regarding existing street furniture and the treatment thereof. Any street furniture in conflict with the works would be relocated and a RRRAP assessment would be undertaken at detailed design as recommended.</p>		

3. DESIGN ORGANISATION AND OVERSEEING ORGANISATION STATEMENTS

Design Organisation Statement

1.8. On behalf of the Design Organisation, I certify that:

- The RSA actions identified in response to the road safety audit problems in this road safety audit have been discussed and agreed with the Overseeing Organisation.

Name:	Sam Carter
Signed & Dated:	
Position:	Project Lead
Organisation:	On behalf of BWB Consulting Ltd



A **CAF** GROUP COMPANY

