



BLEADON QUARRY,  
BRIDGE ROAD, BLEADON.  
SECTION 278 WORKS.

Road Safety Audit Stage 2  
Response Report

For Edenstone Homes.

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Date: 14 July 2023

Doc ref: 25623-HYD-XX-XX-RP-D-0016-P01 RSA2 Response

# DOCUMENT CONTROL SHEET

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Client	Edenstone Homes.	
Project name	Bleadon Quarry, Bridge Road, Bleadon – S278 Works.	
Title	Road Safety Audit Stage 2 Response Report	
Doc ref	25623-HYD-XX-XX-RP-D-0016-P01 RSA2 Response	
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Checked by	Rob Pembridge	
Approved by	Rob Pembridge	

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01	Draft	14/07/2023	First issue for approval



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## 1. PROJECT DETAILS

### 1.1 Project Details

Report title:	Road Safety Audit Stage 2 Response Report
Date:	14/07/2023
Document reference & revision:	25623-HYD-XX-XX-RP-D-0016-P01 RSA2 Response
Prepared by:	Jordan Doe - Hydrock
On behalf of:	Edenstone Homes.

### 1.2 Authorisation sheet

Project:	Bleadon Quarry, Bridge Road, Bleadon – S278 Works.
Report title:	Road Safety Audit Stage 2 Response Report
Prepared by:	
Name:	Jordan Doe
Position:	Senior Highways Engineer
Signed:	
Organisation	Hydrock
Date:	14/07/2023
Approved by:	
Name:	Rob Pembridge
Position:	Principal Highways Engineer
Signed:	
Organisation	Hydrock
Date:	14/07/2023

## 2. INTRODUCTION

### 2.1 Brief Description

The scheme comprises the following works:

New raised table site access T-junction via Bridge Road.

New double yellow parking restrictions in the vicinity of the development frontage.

### 2.2 Reference Information

In accordance with the requirements of the Design Manual for Roads and Bridges (DMRB) GG 119 the following information was provided for the purposes of the audit.

### 2.3 Documents

The below referenced documents were provided to the road safety audit undertaking before the site visit and report.

Document Ref.	Date	Document Title	Organisation
25623-HYD-XX-XX-RP-D-0015	June 2023	RSA 2 Brief	Hydrock
A072013-2	March 2019	Transport Assessment	WYG
2014/SCP/BR/01	February 2014	Road Safety Audit Stage 1	Madhavan Design
N/A	N/A	Appendix 1 – Bridge Road, Bleadon – Highways Issues	SCP

### 2.4 Drawings

Drawing Ref.	Rev	Document Title	Organisation
25623-HYD-XX-XX-DR-D-0101	P04	S278 Bridge Road General Arrangement Sh2	Hydrock
25623-HYD-XX-XX-DR-D-0102.1	P04	S278 Bridge Road Visibility Checks Sh2	Hydrock
25623-HYD-XX-XX-DR-D-0104	P05	S278 Bridge Road Swept Path Analysis Sh2	Hydrock
25623-HYD-XX-XX-DR-D-0106	P04	S278 Bridge Road Site Clearance Sh2	Hydrock
25623-HYD-XX-XX-DR-D-0111	P04	S278 Bridge Road Chainages Sh2	Hydrock
25623-HYD-XX-XX-DR-D-0121	P04	S278 Bridge Road Drainage & Contours Sh2	Hydrock
25623-HYD-XX-XX-DR-D-0131	P02	S278 Bridge Road Long Sections Sh2	Hydrock
25623-HYD-XX-XX-DR-D-0141	P03	S278 Bridge Road Cross Sections Sh2	Hydrock
25623-HYD-XX-XX-DR-D-0161	P03	S278 Bridge Road Legal Plan Sh2	Hydrock
25623-HYD-XX-XX-DR-D-0162	P04	S278 Bridge Road TRO Plan Sh2	Hydrock
25623-HYD-XX-XX-DR-D-0171	P04	S278 Bridge Road Surfacing Sh2	Hydrock
25623-HYD-XX-XX-DR-D-0177	P03	S278 Bridge Road Construction Details Sh3	Hydrock
25623-HYD-XX-XX-DR-D-0178	P03	S278 Bridge Road Construction Details Sh4	Hydrock
25623-HYD-XX-XX-DR-D-0179	P02	S278 Bridge Road Construction Details Sh5	Hydrock
25623-HYD-XX-XX-DR-D-0191	P04	S278 Bridge Road Existing Utilities Sh2	Hydrock

### 3. KEY PERSONNEL

Role	Name	Organisation
Overseeing Organisation		
Highways Officer	Matthew Lacey	North Somerset Council
Road Safety Auditor Members		
Team Leader	Tim Sterling	The Safety Forum
Team Member	Rob Westhead	The Safety Forum
Design Team Members		
Principal Highways Engineer	Rob Pembridge	Hydrock
Senior Highways Engineer	Jordan Doe	Hydrock

#### 4. ROAD SAFETY AUDIT DECISION LOG


Audit Ref	TS-RW-23-4036-RSA2			
Project Title	Stage 2 Road Safety Audit			
Project Ref	C-25623-C			
Hydrock Ref	25623-HYD-XX-XX-RP-D-0016-P01			
Author/Date	The Safety Forum, July 2023.	Hydrock, July 2023.	North Somerset Council, July 2023.	
Problem Ref	RSA Recommendation	Design Organisation Response	Overseeing Organisation Responses	Agreed RSA action
Matters arising from previous Stage 1 Audit.				
3.1.1	<p>Stage 1: Parking surveys should be carried out to determine the exact nature of the on-street parking problem. If necessary, parking restrictions should be provided as part of the scheme to prohibit parking around the site access. Furthermore, suitable visibility splays should be provided which should be kept clear of future landscaping.</p> <p>Stage 2: Parking restrictions are proposed and visibility splays of 33m and 49m are shown. However, it is not known whether these visibility splay distances relate to actual measured speeds and there appears to be a parking lay-by proposed within the visibility splay to the north. As such, aspects of this issue are unresolved and are included as item 4.1 of this report.</p>	<p>Stage 1: Not known.</p> <p>Stage 2: Refer to Transport Assessment para 5.12, extract below.</p> <p>“The application includes for a package of speed reduction measures with a raised speed table at the site access. Clearly, the speed reduction measures will improve the level of road safety, especially for pedestrians. The precise details of the package of measures can be dealt with by planning condition but it is reasonable to assume that they will reduce the 85th percentile speed to below 25mph. As a result, the visibility requirements will actually be less than those quoted above”.</p> <p>As explained in the above passage, the post-development speeds have been assumed to be below 25mph. On the basis that 85th percentile speeds were 25mph as a worst case, the commensurate visibility required is 33m in accordance with Manual for Streets. The Hydrock proposals clearly demonstrate that 33m can be achieved or exceeded in both directions.</p> <p>For avoidance of doubt, the parking lay-by referenced in the RSA recommendation is instead a footway vehicular crossover that provides access to private parking bays. The bays are set back circa 6m from the highway and as such will not obstruct visibility.</p>	<p>Designers response accepted to audit recommendation.</p>	<p>No further action required.</p>
3.2.1	<p>Stage 1: Provide suitable pedestrian measures to allow pedestrians to safely negotiate Bridge Road.</p> <p>Stage 2: The Auditors noted comments in the SCP Highways Overview document.</p> <p>The Auditors acknowledge these comments but note that a local resident advised that the right-of-way via Mulberry Lane is being contended and the use of this proposed link may not be possible.</p> <p>The Auditors consider that the number of additional pedestrian movements along Bridge Road could be significant</p>	<p>Stage 1: Not known.</p> <p>Stage 2: Noted. The remit of the Road Safety Audit is limited to the S278 proposals indicated on the drawings and as such, Mulberry Lane fall outside of this.</p> <p>Notwithstanding the above, pedestrian link access to the development is via Mulberry Lane, as agreed through planning. The majority of the link up to the adopted highway is within the developer’s ownership and there is a small section of unregistered land which they have rights of access over.</p>	<p>Audit team statement is valid. Wider interaction should be considered as may indirectly have implications to road safety at the junction access and on Bridge Road. The designers response is accepted and planning agreement will need to be firmed up.</p>	<p>Ensure right-of-way agreement is in place for link via Mulberry Lane.</p>

	and that the existing 'informal shared use arrangement' is not sufficient to safely accommodate this. Consequently, this issue is considered to be unresolved and is included as item 4.2 of this report.			
3.6.1	<p>Stage 1: A risk assessment based on the 2011 DfT publication Provision of Road Restraint Systems Local Authority Roads should be carried out and suitable containment measures provided, for example through the provision of containment kerbs for the length of the junction table.</p> <p>Stage 2: The 'Vehicle Restraint System Assessment' undertaken by Hydrock has concluded that the "... generally acceptable level of risk does not support the provision of a VRS and as such, has been discounted as a protective measure". On this basis, this item is not carried forward for inclusion in this Stage 2 RSA report.</p>	<p>Stage 1: Not known.</p> <p>Stage 2: No further action.</p>	<p>Disagree. Kerb containment as a minimum should be prescribed along the top of the proposed junction table to prevent errant vehicles (especially in wet/icy conditions) from inadvertently entering the Rhyne.</p> <p>Whilst it is accepted parts of rural North Somerset have an adjacent network of rhyne alongside roadsides. The development access proposals will present increased vehicles movements at right angles to the rhyne.</p> <p>'CD 377 Requirements for road restraint systems' identifies applicable situations for RRRAP/VRS.</p> <p>Examples of common hazards include; Permanent or expected water hazard with a depth of water of 0.6 metres or more, which if entered, can potentially cause harm to the vehicle occupants.</p> <p>Furthermore, the embankments are not designed to a minimum of 1:3 to provide a means of escape. There is also very little verge separation between the carriageway and watercourse for a vehicle driver/occupant to make necessary corrective action. No streetlighting is present or prescribed and traffic calming through horizontal deflection should have appropriate illumination.</p> <p>Due to the lack of verge, a barrier/fence or such the like is unlikely to be suitably placed, so a 125mm kerb face should be prescribed to protect vehicles from entering the rhyne.</p>	<p>Revise drawings to specify a required 125mm kerb upstand along raised length of junction table-top to provide means of containment to adjacent rhyne.</p>
Matters arising from Stage 2 Audit.				
4.1	It is recommended that it is ensured that the necessary clear and unobstructed visibility splays can be achieved.	See response reference 3.1.1.	Designers response above with reference to 3.1.1 accepted.	No further action required.
4.2	It is recommended that the standard of pedestrian provision is improved along Bridge Road, with the shared use objective enhanced by suitable traffic calming measures.	See response reference 3.2.1.	Designers response above with reference to 3.2.1 accepted.	As per action above with reference to 3.2.1.
4.3	It is recommended that the dropped kerbing is located such that pedestrians are able to join or leave the carriageway with good sightlines and without obstructions.	Noted. The proposed parking bays are set back circa 6m from the back of footway and vehicular access will be via crossover. Drop kerbs serving the crossover are deemed sufficient and safe to use by pedestrians.	Designers response accepted.	No further action required.
4.4	It is recommended that the dropped kerbing is provided and located such that pedestrians are able to join or leave the carriageway with good sightlines and without obstructions.	Agree. Drop kerbs have been added to drawing 0101 where the footway terminates south of the development access.	Designers response accepted. Include dropped kerb facility and implement as per revised drawing (25623-HYD-XX-XX-DR-D-0101S2 P05).	Agreed. Implement as per recommendation. No further action required.

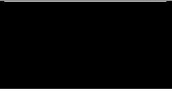
## 5. DESIGN ORGANISATION AND OVERSEEING ORGANISATION STATEMENTS

The following statements should be signed by the design organisation and the Overseeing Organisation.

### 5.1 Design Organisation Statement

On behalf of the design organisation, I certify that:	
1) The actions identified in this response to the road safety audit problems in the RSA have been discussed and agreed with the Overseeing Organisation.	
Name:	Jordan Doe
Position:	Engineer Infrastructure
Signed:	
Organisation	Hydrock
Date:	14/07/2023

### 5.2 Overseeing Organisation Statement

On behalf of the Overseeing Organisation, I certify that:	
1) The actions identified in this response to the road safety audit problems in this RSA have been discussed and agreed with the design organisation; and	
2) The agreed RSA actions will be progressed.	
Name:	Jonathan Gall
Position:	Team Manager, Neighbourhood Traffic and Road Safety Engineering
Signed:	
Organisation	North Somerset Council
Date:	20/07/23