

A795 Ambridge Bypass Safety Scheme Stage 2 Road Safety Audit Response Report



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1. Project Details

1.1 Project Details

Report Title:	A795 Ambridge Bypass Safety Scheme Stage 2 Road Safety Audit Response Report
Date:	21 June 2021
Document Reference & Revision:	AMB-RSA-S2RESPONSE/06/21 Rev. – 1.0
Prepared By:	Laurie Driver
On Behalf of:	Overseeing Organisation

1.2 Authorisation Sheet

Project	A795 Ambridge Bypass Safety Scheme
Report Title:	A795 Ambridge Bypass Safety Scheme Stage 2 Road Safety Audit Response Report
Prepared By:	
Name:	Laurie Driver
Position:	Design Team Leader
Organisation:	DLS Partnership (Highways Division)
Signed:	<i>Laurie Driver</i>
Date:	30 June 2021
Approved By:	
Name:	Laurie Driver
Position:	Project Manager
Organisation:	Overseeing Organisation
Signed:	<i>Elaine Gain</i>
Date:	30 June 2021

2. Introduction

2.1 Background

- 2.1.1 This Road Safety Audit Response Report results from a Stage 2 Road Safety Audit carried out on the A795 Ambridge Bypass Safety Scheme. The Road Safety Audit has been undertaken at the request of Elaine Gain, the Overseeing Organisation Project Manager. The audit was carried out during June 2021.
- 2.1.2 The scheme is to introduce safety improvements and involves the installation of additional traffic signs, amendment to road markings and VRS improvements along the recently constructed Bypass.
- 2.1.3 The Design Team have carefully considered the problems and recommendations raised in the Stage 2 Road Safety Audit Report. This Response Report includes all the problems and recommendations raised by the Road Safety Audit Team, as well as the Designer's Response, the Overseeing Organisation Response and Agreed Actions to the issues raised.

2.2 Key Personnel

2.2.1 Overseeing Organisation

Overseeing Organisation Project Manager – Elaine Gain

2.2.2 Road Safety Audit Team

Audit Team Leader – Michael Juan – Principal Highway Engineer

Audit Team Member – Hugh Turner – Senior Engineer

2.2.3 Design Organisation.

Design Team Leader – Laurie Driver

3. Items Raised At The Stage 2 Audit

3.1 General

3.1.1 PROBLEM 1

Location A: A795 Stowford Junction – Southbound Approach

Summary: Insufficiently specified vegetation clearance, increasing the risk of injury with loss of control type collisions.

The location of the southbound off slip is located on a gradual left-hand bend and is obscured by the current vegetation after the Advance Directional Sign. This vegetation, which is not in leaf, is also partially obscuring the countdown markers on the approach for this junction and could also obscure the visibility of the proposed Direction Sign. The vegetation clearance shown in the supplied drawing gives no dimension other than area. This may lead to insufficient vegetation being removed and compromise the forward visibility of the road layout being achieved and road users being unable to appreciate the approaching off slip. This could result in loss of control type collisions, risking injury to vehicle occupants.

RSA RECOMMENDATION

It is recommended that extents of vegetation are sufficiently detailed so that the intended vegetation clearance is achieved along the southbound approach, making an allowance for seasonal growth.

DESIGN ORGANISATION RESPONSE

Agree – The extents of vegetation clearance will be reviewed to ensure they provide forward visibility in accordance with standards with an allowance for future growth to be confirmed prior to works and agreed with the highway ecologists.

OVERSEEING ORGANISATION RESPONSE

Agree – Vegetation clearance to be checked to ensure it complies with standards with an allowance for annual growth.

AGREED RSA ACTION

Vegetation clearance to be checked to ensure it complies with standards with an allowance for annual growth.

3.1.2 PROBLEM 2

Location B: A795 Southbound Carriageway – Chainage 2520 to 2558

Summary: Existing vegetation within working width of proposed Vehicle Restraint System (VRS), increasing risk of injury if errant vehicle left carriageway.

It is proposed to close the gap in the existing VRS along the southbound carriageway towards the Stowford Junction. At present there is vegetation/trees in this location and appears to be within the working width of the proposed VRS, with no indication that this vegetation is to be removed. Any vegetation/trees that is within the working width of the proposed VRS could impede the operation if struck by an errant vehicle, increasing the risk and severity of injury to vehicle occupants.

RSA RECOMMENDATION

It is recommended that all vegetation/trees within the working width of the proposed VRS are removed, with an allowance for seasonal growth.

DESIGN ORGANISATION RESPONSE

The working width of the proposed N2W4 barrier depends on the system used but will be $\leq 1.3\text{m}$. It is highly unlikely that there are any solid trees within the working width or any seasonal growth within the working width that would affect the performance of the VRS along the whole scheme length. However, a note will be added to the site clearance drawings stating that all vegetation with a 2m range behind the VRS shall, with the approval of the ecologists, be trimmed to ground level.

OVERSEEING ORGANISATION RESPONSE

Agree – That a note be added to the clearance drawings so that any vegetation within the working width, allowing for seasonal growth will be removed.

AGREED RSA ACTION

That a note be added to the clearance drawings so that any vegetation within the working width, allowing for seasonal growth will be removed.

3.2 Local Alignment

3.2.1 No specific road safety issues have been identified at this stage.

3.3 Junctions

3.3.1 PROBLEM 3

Location C: Splitter island on A795 southbound approach to roundabout

Summary: Screen length enables early roundabout entry decisions and could result in vehicle conflicts.

The proposed exact location of the sight screen is not specified in the supplied drawings but appears to approximately coincide with the existing chevron signs. Partial visibility currently exists between A795 southbound traffic and traffic on the circulatory carriageway to the right of the existing chevrons. On site, some road users were observed to make an early decision to enter the roundabout, accelerating as they approached the existing chevrons, whilst other road users slowed prior to the give way line. However, some visibility of circulatory traffic is possible between the existing chevrons, allowing late braking. Similar visibility of the circulatory carriageway is expected to the right of the proposed sight screen, but the proposed sight screen will remove visibility to the right from adjacent vehicles. This may lead to shunt-type collisions between accelerating and braking vehicles on the southbound approach and vehicle conflicts at the southbound roundabout entry. This risks injury to vehicle occupants.

RSA RECOMMENDATION

It is recommended that the sight screen is extended as far north as practicable to minimise visibility between A795 southbound traffic and traffic on the circulatory carriageway.

DESIGN ORGANISATION RESPONSE

The Design Team accept the problem raised by the Road Safety Audit Team. The sight screen has already been extended as far north as practicable within the constraints of the splitter island. The proposed sight screen extends to the end of the splitter island approximately 2.8m past the existing chevron signs. To clarify the location further setting out information of the sight screen will be added to drawing number HE566131-0000_01.

OVERSEEING ORGANISATION RESPONSE

Agree with Designer – Ensure the sight screen is clearly identified, prior to works on the construction drawings.

AGREED RSA ACTION

Ensure the sight screen is clearly identified, prior to works on the construction drawings.

3.4 Non-Motorised User Provision

3.4.1 PROBLEM 4

Location D: Ambridge Distributor Road Eastbound & Westbound Approach -
30mph Terminal Sign TS03 & TS16

Summary: Mounting height of sign adjacent to footpath may be struck by cyclists.

The location of the combined traffic sign TS03 & TS08 is in the grass verge, on the eastbound approach and adjacent to a footpath and is shown to have a mounting height of 1800mm. The location of the combined traffic sign TS16 & TS17 is in the grass verge, on the westbound approach and adjacent to a footpath and the existing sign is known to have a mounting height of 1900mm. Although this footpath is not designated for shared use (cyclists & pedestrians), it is known and been observed on previous site visits in this area that cyclists do regularly utilise this footpath when travelling to and from Ambridge along the Ambridge Distributor Road. The lower part of the sign could be struck by cyclists when travelling past this sign, increasing the risk of injury. This could be more of a concern with the removal of street lighting on the approach to the sign in combination with cycling along this section during the darker mornings & evenings.

RSA RECOMMENDATION

It is recommended that the mounting height of this sign combination is at an appropriate height for all vulnerable road users.

DESIGN ORGANISATION RESPONSE

The verge upon which these signs are mounted are wide enough that there will be adequate lateral clearance to the footway such that the designed mounting height is appropriate.

OVERSEEING ORGANISATION RESPONSE

Agree with Designer – Ensure that the signs have sufficient lateral clearance.

AGREED RSA ACTION

Ensure that the signs have sufficient lateral clearance.

3.5 Road Signs, Carriageway Markings, and Lighting

3.5.1 PROBLEM 5

Location E: A795 Stowford Junction – Splitter Island

Summary: Removal of Direction Sign from Splitter Island may lead to late braking and loss of control collisions.

It is proposed to relocate the Direction Sign from its current location on the splitter island to the commencement of the off slip for the junction within the nearside verge. The proposed marker posts for the splitter island may not clearly identify the junction for approaching motorists. During the site visit it was clear that motorists have been involved in loss of control type collisions and have demolished the direction sign and all the chevron signs on the splitter island.

RSA RECOMMENDATION

It is recommended that the splitter island for approaching motorist is clearly identifiable, for example by replacing the existing chevrons signs on the splitter island with a more durable set and extending further along the island towards the nosing.

DESIGN ORGANISATION RESPONSE

Disagree – The relocation of the directional sign will provide further warning over the existing layout; the vegetation clearance will give a clearer indication of the severity of the radius and the hazard marker posts will highlight the junction nosing. However, following a recent collision at this junction, the arrangement of the chevron signing is being reviewed and more conspicuous chevrons will be provided and spaced to cover a wider area.

OVERSEEING ORGANISATION RESPONSE

Agree with Designer – Although the scope of the scheme, as indicated in the brief, precludes significant expenditure on improved signing at the junction, the opportunity afforded by recent events will be taken to address some of the audit team's concerns

AGREED RSA ACTION

Maintenance works to improve conspicuity and location of signs.

3.5.2 PROBLEM 6

Location F: A795 Northbound Carriageway – TS A795-04

Summary: Proposed location of Advance Direction Sign (ADS) may not be protected by existing VRS, increasing risk of injury if errant vehicle left carriageway.

It is proposed to replace the existing ADS (TS A795-04) to a new location 5m in a northerly direction. The ADS is protected by the current VRS with an existing 8 metres of full height barrier after the sign assembly. The proposed location of the new ADS will place the new sign 5m north and in doing so, will only leave approximately 3m of full height barrier after this proposed assembly. The new location of the ADS in conjunction with the existing VRS may result in the VRS not performing as designed and increase the severity of injury to vehicle occupants if an errant vehicle left the carriageway at this location.

RSA RECOMMENDATION

It is recommended that the proposed new sign assembly is adequately protected by the existing VRS.

DESIGN ORGANISATION RESPONSE

The RSA identifies that the sign is to be relocated 5m west of its existing location. The new site was proposed to avoid removing the foundations of the existing sign. The RSA also says that the new sign assembly would only be protected by 3m of full height VRS. Although the length is longer than 3m and probably nearer to the minimum allowed by CD 377 of 7.5m, the drawings will be amended to indicate that the new sign will be erected in its existing location.

OVERSEEING ORGANISATION RESPONSE

Agree – Sign to be relocated to ensure there is adequate full height VRS as required by CD 377.

AGREED RSA ACTION

Sign to be relocated to ensure there is adequate full height VRS as required by CD 377.

4. Design Organisation Statement

On behalf of the Design Organisation I certify that:

1) The RSA actions identified in response to the Road Safety Audit Report have been discussed and agreed with the Overseeing Organisation.

Name:	Laurie Driver
Position:	Design Team Leader
Organisation:	DLS Partnership (Highways Division) 12-14 Cathedral Close Borchester BO1 6LZ
Signed:	<i>Laurie Driver</i>
Date:	30 June 2021

5. Overseeing Organisation Statement

On behalf of the Overseeing Organisation I certify that:	
1) The RSA actions identified in response to the Road Safety Audit Report have been discussed and agreed with the Design Organisation; and	
2) The agreed RSA actions will be progressed	
Name:	Elaine Gain
Position:	Project Manager
Organisation:	Overseeing Organisation 1 Bentall Street Borchester BO1 6KZ
Signed:	<i>Elaine Gain</i>
Date:	30 June 2021