



Eddisons

PROPOSED HIGHWAYS WORKS, ROSSETT ROAD, WREXHAM

**STAGE 1/2 - ROAD SAFETY AUDIT
MAY 2021**

Transport Planning /Traffic Surveys/ Road Safety Audits

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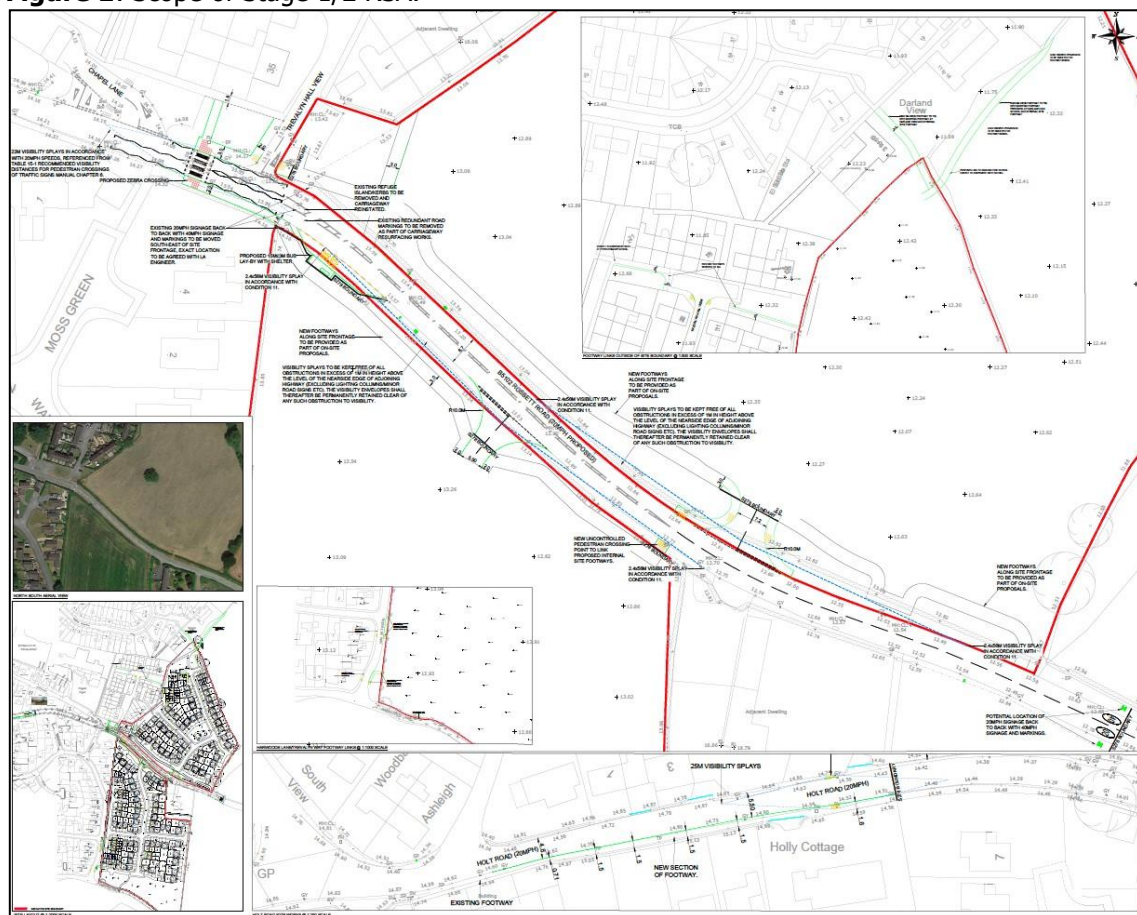
Appendix A – List of drawings and documents supplied for audit.

Appendix B – Location plan of identified problems.

1 INTRODUCTION

- 1.1 This report presents the findings from a combined Stage 1/2 Road Safety Audit (RSA) undertaken on the proposed highways works associated with a residential development at land to the north and south of Rossett Road, Wrexham.
- 1.2 The audit was carried out by the following:
- | | |
|--|---------------------------------|
| Tristan Brooks
BSc (Hons), MBA, CMILT, MCIHT, MSoRSA,
HE RSA Cert. of Competency | - Road Safety Audit Team Leader |
| Jon Preston
MCIHT, MSoRSA | - Road Safety Audit Team Member |
- 1.3 The RSA was commissioned by Eddisons who have designed the scheme and provided the audit information and although there was no formal 'audit brief' the RSA team has accepted that sufficient information has been provided to undertake the Stage 1/2 RSA.
- 1.4 Eddisons have approved the audit team as effective project sponsor. The overseeing organisation is Wrexham County Borough Council.
- 1.5 The site visit was undertaken on Tuesday 11th May 2021 between 11:00-11:35 and comprised a walk and drive-throughs (where available) of the area covered by the scheme. During the site visit there were intermittent showers and the carriageway surface was wet. Traffic in the vicinity of the schemes was low. No pedestrians or cyclists were observed during the site visit.
- 1.6 At the time of the site visit a Zebra crossing was in situ on Rossett Road where the drawings indicate a proposed Zebra crossing will be provided.
- 1.7 The highway network at the proposed schemes eastern extent is subject to a 40mph speed limit, transitioning to a 20mph speed limit in the vicinity of the Rossett Road/ Trevalyn Hall View junction. the audit team would note that no vehicle speed survey data has been provided for review as part of the RSA.
- 1.8 A review of the Personal Injury Collisions (PIC) data between 01/01/2015 and 30/06/2020 (based on information in the crashmap database) has indicated that during this period there has been no PICs in the immediate vicinity of the proposed s278 highways works.
- 1.9** The scope of the RSA is limited to the proposed highways works as illustrated in **Figure 1**.

Figure 1: Scope of Stage 1/2 RSA.



- 1.10** The drawings and documents supplied for audit are listed in **Appendix A**. An annotated drawing showing the locations of the problems identified is provided in **Appendix B**.
- 1.11** The terms of reference of the audit are as that described in DMRB GG/119 Guidelines on Road Safety Audits. This standard has been used for guidance only. The one exception to GG/119 is the inclusion (if applicable) of a notes/observation section at the end of the report. The audit team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria.
- 1.12** The audit team understand that there are no departures from standard within the design of the scheme nor have any previous RSA's been undertaken on the scheme.
- 1.13** The audit team would note that the inter-visibility design parameters at a number of the proposed pedestrian crossings have been based on a 20mph speed limit, although would note that no vehicle speed survey information has been provided for review as part of the RSA to ascertain driver compliance with the speed limit.

- 1.14 The recommendations included within this report should not be regarded as being prescriptive design solutions to the problems raised. They are intended only to indicate a proportionate and viable means of eliminating or mitigating the identified problem, in accordance with GG/119. There may be alternative methods of addressing a problem which would be equally acceptable in achieving the desired elimination or mitigation and these should be considered when responding to this report.

2 ROAD SAFETY AUDIT FINDINGS FROM RSA 1/2

PROBLEM 1

LOCATION: Rossett Road/ Holt Road – pedestrian crossings.

SUMMARY: Potentially insufficient inter-visibility splays could increase the risk of vehicle/pedestrian collisions.

- 2.1 The intervisibility splays at a number of the pedestrian crossings throughout the proposed scheme have been based on vehicle speeds of 20mph (which the audit team note is the existing speed limit), however, no details have been provided with regard to the observed vehicle speeds, which the audit team note can often have poor levels of driver compliance.
- 2.2 It is also noted that the splays appear to of been measured from a 1 metre offset from the edge of the carriageway, where typically the visibility splay would be measured from a distance of 1.5 metres from the edge of the carriageway (where the width of the footway permits this) to account for example pedestrians with pushchairs.
- 2.3 Insufficient inter-visibility splays could increase the risk of vehicle/pedestrian collisions due to injudicious crossing manoeuvres.

RECOMMENDATIONS

- 2.4 It is recommended that vehicle speed surveys are undertaken to ensure that the proposed intervisibility splays at the proposed pedestrian crossings are sufficient. The audit team would note that typically the visibility splay would be measured from a distance of 1.5 metres from the kerb line to account for example pedestrians with pushchairs.
- 2.5 It is also recommended that the visibility splays take into account seasonal growth of the adjacent vegetation that may impede the achievable intervisibility splays.

DESIGNERS RESPONSE

Comments noted. The zebra crossing on Rossett Road has already been installed and our S278 drawings have therefore been amended to illustrate this as an existing feature (rather than a proposal of the S278 works).

The 25m inter-visibility splays for the uncontrolled crossing on Holt Road are adequate for 20mph speeds and Holt Road currently has a speed limit of 20mph. The nature and alignment of the road both ensure that vehicle speeds stay within this limit and it was agreed with Wrexham at planning stage that these splays are sufficient.

A note has now also been added to D002 to ensure that existing hedgerow is trimmed back and maintained to allow for seasonal growth.

PROBLEM 2

LOCATION: Holt Road (opposite Holly cottage) – proposed uncontrolled crossing.

SUMMARY: Introduction of crossing and narrow width of footway may increase the risk of pedestrian/vehicle collisions.

- 2.6 The width of the footway on the northern side of the Holt Road (opposite Holly Cottage) where it is proposed that an uncontrolled pedestrian crossing point is provided is extremely narrow i.e. approximately 0.5 metres. The provision of a formal crossing point at this location may encourage pedestrians to cross at this location where the width of the footway is insufficient, potentially increasing the risk of a pedestrian being struck by a passing vehicle.

- 2.7 The audit team also note that the width of the footway would be unsuitable for a number of pedestrians, particularly those with mobility impairments or pedestrians with pushchairs, potential resulting in pedestrians crossing injudiciously, potentially increasing the risk of vehicle/pedestrian collisions.

RECOMMENDATION

- 2.8 It is recommended that the proposals are amended to address these problems.

DESIGNERS RESPONSE

Comment noted. However, this has been discussed at length during the planning stage of the development and it was agreed with Wrexham that this crossing is sufficient for this location and is ultimately an upgrade on what it there already.

PROBLEM 3

LOCATION: Holt Road – western extent of proposed scheme.

SUMMARY: Width of footway may result in an increased risk of pedestrian/ vehicle collisions.

- 2.9 The width of the proposed footway at the western extent of the scheme on Holt Road will be extremely narrow in places i.e. 0.71 metres as indicated on the drawings provided for audit (although the audit teams view is that there may be an anomaly in the drawings and it may be narrower than the width stated) and it will be insufficient to accommodate for example pedestrians in wheelchairs/mobility scooters, which may result in these users potentially having to use the carriageway at this location, which could potentially increase the risk of pedestrian/vehicular collisions.
- 2.10 The audit team would also note that the effective width of the footway to the west of the proposed extent of the footway widening is reduced by a sign located within the centre of the footway and therefore may be also impassable to certain users.

RECOMMENDATION

- 2.11 It is recommended that the width of the footway be increased.

DESIGNERS RESPONSE

Comment noted, however, as above this arrangement was considered at length during the planning stage and is considered an upgrade to the current arrangement.

PROBLEM 4

LOCATION: Holt Road – western extent of proposed scheme.

SUMMARY: Retention of centreline road markings may increase the risk of vehicle collisions or loss of control type collisions.

- 2.12 The drawings indicate that the width of the carriageway at the schemes western extent will be reduced to 4.8 metres. However, no indication is provided on the drawings if the existing centreline carriageway markings will be removed as part of the proposals. The use of centreline markings, can result in over-running of the carriageway edge, potentially resulting in loss of control type collisions or they may give the impression to drivers that the

carriageway is wide enough for opposing vehicles to pass, when this may not be the case, potentially resulting in head on or side swipe type collisions.

RECOMMENDATION

- 2.13 It is recommended that the proposed lane markings should be revised to address this problem and if the carriageway is to be narrowed, suitable signage warning drivers of the narrowing be provided.

DESIGNERS RESPONSE

Comment noted. D003 now illustrates the existing carriageway centre-line road markings to be removed in the vicinity of the 4.8m section of carriageway.

Given that two cars can pass simultaneously and one car and a refuse type vehicle also, no additional signage warning drivers of the slight carriageway widening is proposed, this will be subject to Wrexham's review.

PROBLEM 5

LOCATION: Trevalyn Hall View (n) - Uncontrolled crossing.

SUMMARY: Depth of tactile paving at the uncontrolled crossing is considered to be insufficient to provide suitable warning of the carriageway to pedestrians with visual impairments.

- 2.14 It is proposed that the depth of the tactile paving on the eastern side of the uncontrolled crossing at the northern extent of Trevalyn Hall View is 0.8 metres. Tactile paving with a depth of less than 1.2 metres, at what is considered to be an inline type crossing approach, is unlikely to provide sufficient warning to pedestrians with visual impairments of the presence of the carriageway, who may inadvertently step into the carriageway, potentially resulting in an increased risk of the pedestrian being struck by a vehicle.

RECOMMENDATION

- 2.15 It is recommended that the depth of the tactile paving be increased to 1.2 metres.

DESIGNERS RESPONSE

Comment noted. Tactile paving depth increased in this location.

3 NOTES/OBSERVATIONS

- 3.1 No details of the proposed lighting provision were available for review as part of the RSA and therefore the audit team have not been able to assess any potential road safety problems associated with this element of the scheme.
- 3.2 The audit team note that Sign Ref: S2 relates to the proposed Zebra crossing which is already in-situ and Sign Ref: S5 relates to humps within the carriageway, although the proposed Zebra crossing design does not appear to include a raised table type arrangement, and would advise the design team that these matters are addressed.
- Comments noted. S2 has now been removed from the drawings and the hump sign (S5) is in relation to the humps further west of the zebra crossing.

4 AUDIT STATEMENT

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

Signed:



Date: 13 May 2021

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Signed:



Date: 13 May 2021

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APPENDIX A

List of Drawings and Documents Provided for Audit

3261-D001 – Rev B

S278 General Arrangement

3261-D002 – Rev B

S278 Construction Materials

3261-D003 – Rev B

S278 Signs and Markings

0807-SP01 – Rev F

Vehicle Swept Path Analysis

PIC Data

(Jan 2015 – June 2020)

APPENDIX B

Location of Identified Problems

