

**Stratfield Mortimer to Burghfield**

**Updated layout**

**Shared Cycleway/Footway**

**Produced for:**

**Ridge**

**Date: March 2023**

**Stage 1 Road Safety Audit Report**

**(Feasibility)**

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**DOCUMENT REGISTER**

**Project Name:** StratfieldMortimer to Burghfield Cycleway/Footway Feasibility

**Report Title:** Stage 1 Road Safety Audit.

**Date:** 4th March 2022

**Client:** Ridge

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| --- | --- | --- | --- |
| Audit Team | Name | Position | Date |
| Audit Team Leader: | Peter Ronald | Director | 04/03/2023 |
| Audit Team Member: | Lee Turner | Road Safety Auditor | 04/03/2023 |
| Approved By: | Peter Ronald | Director | 04/03/2023 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Revision History | | | | | |
| Revision | Date | Description | Audit Team Leader | Audit Team Member | Approved |
| - | 04/03/2023 | Draft | PR | LT | PR |
| A | 04/03/2023 | Final | PR | LT | PR |
|  |  |  |  |  |  |

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# Executive Summary

1.1 This scheme is promoted by Stratfield Mortimer Parish Council. This Road Safety Audit is supplied under the provisions of the Safety Audit Request dated 23rd February 2023.

# Introduction

2.1 This report results from a Stage 1 Road Safety Audit carried out on proposals to provide a combined Footway /cycle path on land between Stratfield Mortimer and Burghfield adjacent to Reading Road, and new Parallel Crossing at the junction of Reading Road /Goring Lane/Padworth Road junction at the northern end of the new path. The new path mostly follows an existing tack through woodland and an existing tarmac path to the south adjacent to College Piece.

2.2 **Audit Team Membership**

The Audit Team comprised the following individuals:

Peter Ronald I. Eng., AMICE, MCIHT, MSoRSA, (HE - RSA Cert of Comp).

(Audit Team Leader)

Lee Turner MCIHT.

(Audit Team Member)

2.3 **Audit Site Visit**

A site visit was carried out on Tuesday 28th February 2023 by the Audit Team between 1.00pm and 2.30pm. The weather conditions were dry & overcast. The road surface was dry. Traffic flows were light and limited pedestrian and minimal cycle movements were observed. Vehicle speeds were perceived to be within the posted derestricted speed limit along Reading Road.

The Audit also comprised an examination of the drawing provided by Ridge and any additional support documents completed by the Audit Team as listed in Appendix A. All safety issues are with reference to the feasibility design details shown on the drawings.

2.4 **Strategic Decisions**

The Audit Team has not been advised of any Strategic Decisions made by the local Highway Authority or by the local Planning Authority.

2.5 **Audit Brief**

The Audit Team were not provided with an Audit Brief by the Local Authority.

2.6 **Terms of Reference**

The terms of reference of the audit are based on “Guidelines For the Safety Audit of Highway Schemes” published by the Institution of Highways and Transportation, other guidance references are the Traffic Signs Regulations and General Directions 2016, and GG 119 Design Manual for Roads and Bridges.

The Audit Team has examined and reported only on the road safety implications of the scheme and has not verified the compliance of the designs to any other criteria. However, to clearly explain a safety problem or the recommendation to resolve a problem the Audit Team may, on occasion, have referred to a design standard or other guidance documents.

2.7 **Audit Recommendations**

Recommendations included within this report should not be regarded as being prescriptive design solutions to the problems identified. They are only to indicate a proportionate and viable means of eliminating or mitigating the identified road safety audit matters, and in no way imply that a formal design process has been undertaken.

There may be alternative measures of addressing a problem which would be equally acceptable or superior in achieving the desired degree of mitigation and these should be considered by the designer when responding to this report.

2.8 **Scope of Road Safety Audits**

Road Safety Audit shall only be concerned with Road Safety Matters i.e., *an element of the existing road environment or proposed road environment that could potentially contribute to a road traffic collision or features that could present a risk of injuries to road users.*

Road Safety Audit is not a technical check that the design conforms to standards and/or best practice guidance.

Road Safety Audit is not a check that the scheme has been constructed in accordance with the design.

Road Safety Audit does not consider structural safety.

Road Safety Audit does not cover health and safety issues concerning road workers during the construction phase but may cover the future maintenance and operation of the road.

Road safety matters resulting from the operation of facilities for highway maintenance that affect road users shall be included in the scope of Road Safety Audit.

The needs of all road users shall be assessed when undertaking Road Safety Audits.

# Risk Assessment

3.1 Each of the Auditors’ responses is classified as either a ‘Problem’ or a ‘Nil Response/Comment’. Items classified as a 'Problem' denote matters likely to result in significant road safety hazards. Items marked as ‘Nil Response/Comment’ are less serious but worthy of consideration by the Designer and/or by the Overseeing Organisation.

3.2 Although all the problems identified are of sufficient importance to require action, the table below shows their relative urgency based on the risk perceived by the Safety Auditors. The level of risk assigned to each problem is largely subjective and is only intended as a guide to assist the client in determining the priority of the road safety matters raised.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Severity / Risk Level** | **Probability** | | | | |
| **Frequent** | **Probable** | **Occasional** | **Remote** | **Improbable** |
| **Catastrophic** | \*\*\*\*Problem\*\*\*\*  (Urgent) |  |  |  |  |
| **Critical** |  | \*\*\*Problem\*\*\*  (High Risk) |  |  |  |
| **Major** |  |  | \*\*Problem\*\*  (Medium Risk) |  |  |
| **Minor** |  |  |  | \*Problem\*  (Low Risk) |  |
| **Negligible** |  |  |  |  | Comment |

# Historical Summary

4.1 Unknown.

# Existing Environment

* 1. Reading Road is a single carriageway rural local distributor road that links through from Mortimer to Burghfield running in a south /north direction with grass verges on each side fronting woodland. It has a derestricted speed limit and does not have a system of street lighting. It is also a bus route. There is limited development along the route
  2. There is a short length of Reading Road that has a steep gradient and hidden dip just north of Longmoor Lane near Five Oaken Cottage

The proposed path follows an existing tarmac path adjacent to the College Piece residential development.

# Collision Data

* 1. The Audit Team have not been provided with any recorded injury collision data as part of this road safety audit. However, interrogation of www.crashmap.co.uk indicates that there was two slight personal injury collisions on the section of Reading Road that is the subject of this audit during the 2017 - 2021 five-year period. One occurred south of Longmoor Lane in March 2021 and involved two vehicles the second was at the Reading Road /Padworth Road junction in April 2020 and involved two vehicles.

# Survey Information

7.1 None provided.

# Audit Assessment

8.1 The table below summarises the findings from this audit which are described in detail within the following pages.

Identified locations of Road Safety Audit Matters are indicated on drawings within **Appendix B** to the rear of this report.

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | **Item** | **Comments** | **Notes** |
| **A1** | **General** |  |  |
| A1.1 | Departures from Standards |  |  |
| A1.2 | Cross-sections |  |  |
| A1.3 | Cross-sectional Variation |  |  |
| A1.4 | Drainage |  | Not detailed |
| A1.5 | Landscaping | Problem | (8.1) Vegetation obstructs visibility of new crossing for vehicles approaching from Padworth Road |
| A1.6 | Public Utilities/Services Apparatus |  |  |
| A1.7 | Lay-bys |  |  |
| A1.8 | Access | Problem | (8.2) Proposed refuge island restricts existing vehicle access to number 2 |
| A1.9 | Emergency Vehicles |  |  |
| A1.10 | Future Widening |  |  |
| A1.11 | Adjacent Development |  |  |
| A1.12 | Basic Design Principles |  |  |
| **A2** | **Local Alignment** |  |  |
| A2.1 | Visibility |  |  |
| A2.2 | New/Existing Road Interface |  |  |
| A2.3 | Vertical Alignment |  |  |
| **A3** | **Junctions** |  |  |
| A3.1 | Layout |  |  |
| A3.2 | Visibility | Problem | (8.3) Reduced visibility at the Longmoor Lane junction at crossing point |
| **A4** | **Non-Motorised User Provision** |  |  |
| A4.1 | Adjacent land |  |  |
| A4.2 | Pedestrian/cycle routes provided | Problems | (8.4) Additional footways required at the northern junction with Reading Road / Goring Lane to facilitate pedestrian access to the proposed path from Goring Lane and the eastern side of Reading Road  (8.5) Additional measures will be required at the southern junction with Victoria Road / St Catherine’s Hill to facilitate access to the proposed path  (8.6) Upgraded paths will be required to facilitate cycle access from the adjacent College Piece development along the exiting pedestrian paths  (8.7) Cycle crossing width needs to be increased to 3m as two way  (8.8) Existing footway on western side of new cycle crossing will need to be changed to shared use. |
| A4.3 | Facilities adequate |  |  |
| A4.4 | Separation from carriageway |  |  |
| A4.5 | Special requirements elderly/young infirm |  |  |
| A4.6 | Tactile paving/guardrails | Problem | (8.9) Incorrect tactile paving layout detailed at controlled crossing |
| A4.7 | Junctions |  |  |
| A4.8 | Routes clear of obstruction | Problems | (8.10) Stile will need to be removed north of College Piece at start of woodland path as this will obstruct cycles access  (8.11) Vehicle observed parked infront of Five Oaken Cottage causing obstruction |
| A4.9 | Equestrians |  |  |
| **A5** | **Road Signs, Carriageway Markings And Lighting** |  |  |
| A5.1 | Signs |  |  |
| A5.2 | Lighting | Comment | (9.1) Lighting improvements may need to be improved at new Parallel Crossing |
| A5.3 | Poles and Columns |  |  |
| A5.4 | Road Markings |  |  |

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| **8.1 \*Problem\* (Item A1.5)** | |
| **Location:** | Reading Road /Padworth Road junction |
| **Summary:** | Vegetation obstructs visibility of new crossing for vehicles approaching from Padworth Road |
| A blue sign on the side of a road  Description automatically generated with medium confidence  A new controlled crossing is detailed . There is vegetation that obstructs the visibility of the new crossing for vehicles approaching from Padworth Road . This vegetation will need to be cut back to ensure the crossing can be seen from Padworth Road. | |
| **TYPE OF CONFLICT/COLLISION** | |
| Risk of collisions on crossing due to reduced visibility | |
| **RECOMMENDATION** | |
| Cut back vegetation as required to improve visibility | |

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| **8.2 \*Problem\* (Item A1.8)** | |
| **Location:** | Reading Road. Vehicle access to number 2 |
| **Summary:** | New pedestrian crossing refuge island restricts vehicle access to property |
| A picture containing tree, outdoor, road, ground  Description automatically generated  A new controlled crossing is detailed with central pedestrian refuge island. This island appears to restrict the vehicle access to number 2. Carry out vehicle swept path analysis to confirm that vehicle access is maintained to the property. | |
| **TYPE OF CONFLICT/COLLISION** | |
| Risk of vehicles unable to access vehicle access to number 2 | |
| **RECOMMENDATION** | |
| Carry out vehicle swept path analysis to confirm that vehicle access is maintained to the property and amend design if necessary | |

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| **8.3 \*\*Problem\*\* (Item A3.2)** | |
| **Location:** | Reading Road / Longmoor Lane |
| **Summary:** | Reduced visibility at pedestrian/cycle crossing point at junction of Reading Road /Longmoor Lane |
| A road with trees on the side  Description automatically generated with medium confidence A road with trees on the side  Description automatically generated with low confidence  The new path crosses over the Longmoor Lane junction. There is reduced visibility of oncoming /turning vehicles at the junction this is resulting in potential collisions with pedestrians and cycles crossing the side road . Ensure that adequate visibility is achievable at the crossing point | |
| **TYPE OF CONFLICT/COLLISION** | |
| Collisions at junction due to reduced visibility | |
| **RECOMMENDATION** | |
| Ensure that adequate visibility is provided at the crossing point | |

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| **8.4 \*\*Problem\*\* (Item A4.2)** | |
| **Location:** | Reading Road /Goring Lane junction |
| **Summary:** | Additional lengths of path and pedestrian crossing point required at Reading Road/Goring Lane junction |
| A picture containing text, outdoor, tree, ground  Description automatically generated  A picture containing outdoor, tree, road, ground  Description automatically generated  The new path will introduce additional pedestrian /cycle crossing movements at the Reading Road /Goring Lane junction where there is an existing established worn path with people wanting to access the new path . Additional facilities will be required at the junction to enable pedestrians and cyclists to negotiate around the junction to access and exit from the new path | |
| **TYPE OF CONFLICT/COLLISION** | |
| Collisions due to inadequate pedestrian / cycle paths and crossing points at junction | |
| **RECOMMENDATION** | |
| Provide additional lengths of footway/cycle paths with crossing points at junction | |

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| **8.5 \*\*Problem\*\* (Item A3.2)** | |
| **Location:** | Victoria Road / St Catherine’s Hill junction and along Victoria Road at existing bus stop |
| **Summary:** | Additional pedestrian /cycle crossing facilities required at Victoria Road junction and along Victoria Road to provide access to new path |
| A picture containing outdoor, grass, road, tree  Description automatically generated A road with trees on the side  Description automatically generated with medium confidence    A new pedestrian/cycle path is detailed set back to the northeast of the existing junction with Victoria Road and St Catherine’s Hill . There are no facilities proposed to enable pedestrians and cyclists to join the new path from the adjacent junction or to cross over Victoria Road . Provide new paths and pedestrian crossing facilities at the junction and along Victoria Road to enable pedestrians and cyclists to access the new path | |
| **TYPE OF CONFLICT/COLLISION** | |
| Collisions due to inadequate pedestrian / cycle paths and crossing points | |
| **RECOMMENDATION** | |
| Provide additional pedestrian crossing facilities at junction and along Victoria Road | |

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| **8.6 \*Problem\* (Item A4.2)** | |
| **Location:** | Paths connecting College Piece to new cycle path |
| **Summary:** | Existing pedestrian paths need to be upgraded to facilitate cycle access from College Piece to the new shared use path |
| A picture containing grass, tree, outdoor, plant  Description automatically generated A picture containing grass, outdoor, house, plant  Description automatically generated  A picture containing grass, outdoor, sky, tree  Description automatically generated  There are existing pedestrian paths from College Piece to the new shared use path. Cyclists will use these paths illegally to access the new shared use facility. Upgrade exiting paths to facilitate safe cycle access to the new shared use path | |
| **TYPE OF CONFLICT/COLLISION** | |
| Cyclists in collisions with pedestrians on unsuitable paths | |
| **RECOMMENDATION** | |
| Upgrade existing paths to be shared use | |

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| **8.7 \*Problem\* (Item A4.2)** | |
| **Location:** | Reading Road / Goring Lane. Parallel Crossing |
| **Summary:** | Cycle crossing width on parallel crossing needs to be increased to 3m as two way |
| There is a two way cycle crossing detailed at the new parallel crossing that is only 2m wide . Current guidance recommends 3m minimum width for such two way cycle crossings so it can be used by two way cycles safely. Amend design to increase width of cycle crossing to 3m if possible | |
| **TYPE OF CONFLICT/COLLISION** | |
| Risk of collisions between two way cycles crossing road | |
| **RECOMMENDATION** | |
| Amend design to increase width of two way cycle crossing to 3m if possible | |

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| **8.8 \*Problem\* (Item A4.2)** | |
| **Location:** | Reading Road . Footway on western side of new crossing |
| **Summary:** | Existing footway needs to be changed to be shared use to link up with proposed parallel crossing |
| There is a new parallel crossing detailed that allows cycles to cross over the road from the new shared use path. The footway on the western side of the new crossing needs to be changed to shared use to allow cycles to use the path legally | |
| **TYPE OF CONFLICT/COLLISION** | |
| Risk of collisions between pedestrians and cycles using footway illegally | |
| **RECOMMENDATION** | |
| Change footway on western side of new parallel crossing to be shared use | |

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| **8.9 \*Problem\* (Item A4.6)** | |
| **Location:** | Reading Road / Goring Road. Eastern side of new controlled crossing |
| **Summary:** | Incorrect tactile paving layout detailed at controlled crossing |
| There is a new parallel crossing detailed with incorrect tactile paving layout on the easern side of the crossing . This will confuse visually impaired pedestrians waiting to cross over the road. Amed tactile paving layout design. | |
| **TYPE OF CONFLICT/COLLISION** | |
| Risk of confusion for visually impaired pedestrians crossing road due to incorrect tactile paving | |
| **RECOMMENDATION** | |
| Amend tactile paving layout design. | |

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| **8.10\*Problem\* (Item A4.8)** | |
| **Location:** | New path along Reading Road north of College Piece |
| **Summary:** | Existing stile will need to be removed to facilitate cycle access to new path |
| A picture containing tree, outdoor, ground, forest  Description automatically generated  There is an existing stile on the route of the new path. This will obstruct cycle access and requires removal | |
| **TYPE OF CONFLICT/COLLISION** | |
| Cycles unable to use new path | |
| **RECOMMENDATION** | |
| Remove stile from new path | |

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| **8.11 \*Problem\* (Item A4.8)** | |
| **Location:** | Reading Road .Path infront of Five Oaken Cottage |
| **Summary:** | Parked vehicle observed inline of new path outside Five Oaken Cottage |
| A picture containing tree, outdoor, ground, road  Description automatically generated  A new shared use path is detailed along the eastern side of Reading Road passing infront of Five Oaken Cottage. There was a parked vehicle observed that will obstruct the new path. Monitor parking and introduce additional parking restrictions if required or proceed with optional route as proposed | |
| **TYPE OF CONFLICT/COLLISION** | |
| Pedestrian / cyclist conflict with parked vehicles | |
| **RECOMMENDATION** | |
| Monitor parking to see if additional measures required or proceed with optional route | |

# Nil Response/Comments

* 1. Lighting may need to be improved at new controlled crossing

# Non-Motorised User Report (NMUs)

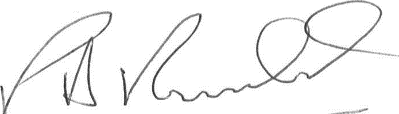
* 1. The scheme provides improved pedestrian / cycle facilities along Reading Road between Mortimer and Burghfield to encourage more active travel. This report has identified road safety problems affecting pedestrians and cyclists that should be considered.

# Audit Team Statement

I certify that we have examined the drawings listed within **Appendix A** and that the site has been inspected. The examination has been carried out with the sole purpose of identifying road safety matters that can be addressed to improve the safety of the scheme.

The problems identified have been noted in the report together with associated safety improvement suggestions that we recommend should be studied for implementation.

I can confirm that we have not been involved with the scheme design.



Peter Ronald 4th March 2023

**(Audit Team Leader)**

****

Lee Turner 4th March 2023

**(Audit Team Member)**

# Appendix A - List of Documents

**Drawings**

Title Drg. No. Revision

General Arrangement 5014549-RDG-XX-XX-DR-C-010 P03

Northern crossing general arrangement 5014549-RDG-XX-XX-DR-C-011 P01

# Appendix B - Identified Road Safety Audit Matters Location Plans

Diagram

Description automatically generated

Diagram

Description automatically generated

# Appendix C – Designer/Overseeing Authority and Auditor Response to Stage 1 Road Safety Audit

|  |  |  |  |
| --- | --- | --- | --- |
| Stage 1 Road Safety Audit  DESIGNER’S ROAD SAFETY AUDIT RESPONSE  **Scheme Name: Stratifield Mortimer to Burghfield Cycleway Facility** | | | |
| The issues categorised in this road safety audit as ‘Problem’ matters are those causing serious concern and are summarised below. The purpose of this form is for the scheme Designer or Overseeing Organisation to respond to the ‘Problem’ matters. Responses should be returned to Traffic Management Consultants. ‘Comments’ in this report are made for the benefit of the Designer and are not referred to below. | | | |
| **RSA Matter** | **Summary of RSA Problem** | **Designer’s Response** | **Overseeing Authority Response** |
| 8.1 | Vegetation obstructs visibility of new crossing for vehicles approaching from Padworth Road | Vegetation will be trimmed back as part of crossing/widening works in this area. |  |
| 8.2 | New pedestrian crossing refuge island restricts vehicle access to property | Vehicle access for southbound vehicles accessing property will be impacted, vehicles will be able to U-turn at roundabout |  |
| 8.3 | Reduced visibility at pedestrian/cycle crossing point at junction of Reading Road /Longmoor Lane | Vegetation will be trimmed back, vehicles turning into Longmoor Lane will be at reduced speed. |  |
| 8.4 | Additional lengths of path and pedestrian crossing point required at Reading Road/Goring Lane junction | The proposals provide a formal crossing to avoid the need for this type of informal path and crossing. |  |
| 8.5 | Additional pedestrian /cycle crossing facilities required at Victoria Road junction and along Victoria Road to provide access to new path | The scheme is to provide a link along Reading Road. The limit of works must be realistic to ensure financial viability of the scheme. |  |
| 8.6 | Existing pedestrian paths need to be upgraded to facilitate cycle access from College Piece to the new shared use path | Similar to 8.5, the extent of works must respect the main objective and remain financially viable. |  |
| 8.7 | Cycle crossing width on parallel crossing needs to be increased to 3m as two way | The overall crossing width is 4m. The route is expected to be low usage so regular two way traffic is unlikely. |  |
| 8.8 | Existing footway needs to be changed to be shared use to link up with proposed parallel crossing | It is proposed to end the shared route here. |  |
| 8.9 | Incorrect tactile paving layout detailed at controlled crossing | Amended |  |
| 8.10 | Existing stile will need to be removed to facilitate cycle access to new path | This will be removed |  |
| 8.11 | Parked vehicle observed inline of new path outside Five Oaken Cottage | Noted. The introduction of a full height kerb should also discourage this type of parking. |  |

**AUDIT TEAM RESPONSE to designers comments**

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