
**VOLUME 5 ASSESSMENT AND
PREPARATION OF ROAD
SCHEMES**

**SECTION 2 PREPARATION AND
IMPLEMENTATION**

PART 5

HD 42/17

**WALKING, CYCLING & HORSE-RIDING
ASSESSMENT AND REVIEW**

SUMMARY

This document contains requirements for the provision of Walking, Cycling & Horse-Riding Assessment and Review on the motorway and all- purpose trunk road network.

INSTRUCTIONS FOR USE

This is a revised document to be incorporated into the Manual.

1. Remove existing contents pages for Volume 5 and insert new contents pages for Volume 5.
2. Remove HD 42/05 from Volume 5, Section 2, Part 5.
3. Insert HD 42/17 into Volume 5, Section 2, Part 5.
4. Archive this sheet as appropriate.

Note: A quarterly index with a full set of Volume Contents Pages is available separately from The Stationery Office Ltd.



HIGHWAYS ENGLAND

HD 42/17
Volume 5, Section 2
Part 5



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DEPARTMENT FOR INFRASTRUCTURE
NORTHERN IRELAND

Walking, Cycling and Horse-Riding Assessment and Review

Summary: This document contains requirements for the provision of Walking, Cycling & Horse-Riding Assessment and Review on the motorway and all-purpose trunk road network. It replaces HD 42/05 Non-Motorised User Audit and the subsequent Interim Advice Note 143/11 Supplementary Advice and Requirements for the Provision for Non-Motorised Users and Accessibility during planning, design, construction and handover of Improvement Schemes.

REGISTRATION OF AMENDMENTS

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1. INTRODUCTION

Background

- 1.1 HD 42 has been updated following the introduction of the Highways England Strategic Business Plan and Roads Investment Strategy as well as the Infrastructure Act 2015 coming into force. These policy changes have driven and informed the development of this document. In particular, the Government is seeking to encourage walking, cycling & horse-riding through national and local policies and plans.
- 1.2 HD 42/17 Walking, Cycling & Horse-Riding Assessment and Review replaces the process set out in HD 42/05 Non-Motorised User Audit and the subsequent Interim Advice Note 143/11 Supplementary Advice and Requirements for the Provision for Non-Motorised Users and Accessibility during planning, design, construction and handover of Improvement Schemes.

Scope and Purpose

- 1.3 This Requirement and Advice Document (RAD) sets out the procedures required to implement Walking, Cycling & Horse-Riding Assessment and Review (WCHAR) for highway schemes on motorways and all-purpose trunk roads. It includes requirements and advice to be used in the assessment and review of walking, cycling & horse-riding opportunities for highway schemes. It defines the relevant schemes and stages in the design process at which Walking, Cycling & Horse-Riding Assessments and Reviews shall be undertaken.
- 1.4 The purpose of this document is to facilitate the inclusion of all walking, cycling & horse-riding modes in the highway scheme design process from the earliest stage, enabling the design team to identify opportunities for improved facilities and integration with the local and national network(s) throughout the design process.
- 1.5 Walking, Cycling & Horse-Riding Assessment and Review is applied to highway schemes, through which the design team makes an early assessment of the existing provision of walking, cycling & horse-riding facilities in order to identify potential opportunities for improvement and integration; and provides an ongoing review of scheme design to assess the integration of the scheme into the local and national network(s).
- 1.6 Walking, Cycling & Horse-Riding Assessment and Review is intended to provide increased interaction and engagement with key stakeholders to maximise opportunities for walking, cycling & horse-riding.
- 1.7 The WCHAR process applies only as described in **Chapter 2** of this RAD or at the specific request of the Overseeing Organisation.
- 1.8 Walking, Cycling & Horse-Riding modes (or users) are primarily defined within this document as:
 - a) Pedestrians – including mobility impaired and vulnerable pedestrians.
 - b) Cyclists – including mobility impaired and vulnerable cyclists.
 - c) Equestrians – including mobility impaired and vulnerable equestrians.
- 1.9 Other users to be considered as part of this process include (but not limited to):
 - a) Scooter riders (non-motorised).
 - b) Cyclists with electrically assisted pedal cycles (where these conform to Department for Transport or other relevant regional regulations and where they may legally be used).

- c) Users of powered wheelchairs (where these conform to Department for Transport regulations and where they may legally be used).
- 1.10 Ex-vehicle pedestrians, such as those using a layby or emergency refuge area, are not specifically considered within this document as their primary mode of travel to a particular location on the motorway and all-purpose trunk road network is vehicular.
- 1.11 The completion of the WCHAR process is the responsibility of the design team. It is not an external audit of walking, cycling & horse-riding matters related to the scheme. The competencies expected of the practitioner within the design team responsible for leading this work are set out in Chapter 3 of this RAD.
- 1.12 The process is made up of two distinct parts. The first part is an assessment of the current or existing situation (Walking, Cycling & Horse-Riding Assessment); whilst the second part relates to an ongoing review of user opportunities throughout the design process (Walking, Cycling & Horse-Riding Review). The process concludes prior to the commencement of construction of a highway scheme.

Assumptions

- 1.13 This RAD is intended to be read by professionals who have an understanding of the needs and characteristics of pedestrians, cyclists and equestrians.
- 1.14 This RAD should be read in conjunction with relevant DMRB documents and appropriate design guidance documents.

Definitions and Abbreviations

- 1.15 The following definitions and abbreviations are provided solely for reference within the confines of this document.
- 1.16 'Must' is used in this RAD to denote a statutory obligation.
- 1.17 'Shall' is used in this RAD to denote a requirement that is to be strictly followed.
- 1.18 'Should' is used in this RAD to denote a recommendation (not a requirement).
- 1.19 'Walking, Cycling & Horse-Riding Assessment and Review' means the overall process for the consideration of walking, cycling & horse-riding facilities within highway schemes.
- 1.20 'Walking, Cycling & Horse-Riding Assessment' means the first part of the process. Also referred to as 'the Assessment' within this RAD.
- 1.21 'Walking, Cycling & Horse-Riding Assessment Report' means the document output of the Assessment.
- 1.22 'Walking, Cycling & Horse-Riding Review' means the second and final part of the process. Also referred to as 'the Review(s)' within this RAD.
- 1.23 'Walking, Cycling & Horse-Riding Review Report' means the document output of the Review(s).
- 1.24 'Lead Assessor' means a designated and competent practitioner who is responsible for the completion of the WCHAR process in accordance with this RAD.
- 1.25 'Assessor' means a practitioner who is responsible for assisting the Lead Assessor where required.

- 1.26 'Assessment and Review Team' means the team of Lead Assessor and any additional Assessors who are responsible for undertaking the Assessment and /or Review. Also referred to as 'Assessment Team' and 'Review Team' for appropriate stages of the process.
- 1.27 'Design team' means the team responsible for progression of the highway scheme design as commissioned by the Overseeing Organisation. In the case of a development scheme, the design team is commissioned by the third party.
- 1.28 'Design team leader' means the person taking responsibility for the highway scheme design and the commissioning of the WCHAR process.
- 1.29 'Third party-led scheme' means any scheme that is promoted by a developer or third party organisation that will result in an improvement to the motorway or all-purpose trunk road network.
- 1.30 'Walking, Cycling & Horse-Riding Facility' or 'user facility' means a facility dedicated for the use of pedestrians, cyclists and equestrians. This can include footways, shared use paths, bridleways, cycle tracks, footpaths, pedestrian crossings, cyclist crossings, equestrian crossings, on-road cycle lanes and signal priority measures. Ancillary facilities that are linked to the above are also included. This list is not exhaustive.
- 1.31 'Urban area' means an area consisting of settlements of more than 10,000 people.
- 1.32 'Rural area' means an area consisting of settlements of less than 10,000 people.

Implementation

- 1.33 This RAD shall be implemented immediately, except where:
- a) The procurement of works, at any stage from conception through design to completion of construction, has reached a stage at which, in the opinion of the Overseeing Organisation, use of this document would result in significant additional expense or delay progress (in which case the decision shall be recorded in accordance with the Overseeing Organisation's procedure).
 - b) A contract has terms which apply specifically to the implementation of new requirements.

Feedback and Enquiries

- 1.34 Users of this RAD are encouraged to raise any enquiries and/or provide feedback on its content and usage.
- 1.35 The email address for general enquiries and feedback is:

dmr_enquiries@highwaysengland.co.uk

WITTHDRAWN

2. PROCESS REQUIREMENTS

Applicability Criteria

- 2.1 The WCHAR process shall apply to all highway schemes where there is a potential impact on pedestrians, cyclists or equestrians on the motorway and all-purpose trunk road network. The design team leader shall determine the applicability of the WCHAR process on a scheme by scheme basis.
- 2.2 The following schemes are exempt from the WCHAR process:
- a) Schemes located entirely within the extents of existing roads for which motorway regulations apply where pedestrians, cyclists and equestrians are not permitted.
 - b) Schemes with no impact on pedestrians, cyclists and equestrians and where this can be clearly demonstrated prior to commencing the WCHAR process.
- 2.3 Where there is insufficient data to confirm that a highway scheme is exempt from the process, the WCHAR process shall apply.
- 2.4 Where clauses 2.2a and 2.2b are used for the exemption of the WCHAR process on a highway scheme, the design team leader shall record this decision within the project file. Annex A provides an illustrative exemption file note for the formal recording of this decision. Figure 2/18 shows a flowchart depicting the overall process and is included at the end of this Chapter.

Application to Temporary Traffic Management Phase

- 2.5 The WCHAR process is not generally applied to temporary traffic management phases of highway schemes. However, if the temporary traffic management phase of a highway scheme requires specific consideration of the needs of pedestrians, cyclists and equestrians then the WCHAR process shall be applied.

Process management

- 2.6 The design team shall include an appropriate Lead Assessor to undertake the WCHAR process. The design team leader shall be responsible for identifying and appointing the Lead Assessor and in doing so shall ensure that the person responsible for the role has sufficient knowledge and experience to manage and complete the process. This knowledge and experience may need to be found outside the usual highway design staff resources and, in some cases, this may need to be found outside the design organisation responsible for the highway scheme. Chapter 3 provides guidance on the competencies expected of a Lead Assessor.

Scope of WCHAR Process

- 2.7 The Lead Assessor shall take into account the size and complexity of a highway scheme to determine the level of detail required for the WCHAR process, which shall be one of the following two defined categories:
- a) A large scheme – highway schemes comprising new road construction (including new motorways where applicable), significant changes to an existing all-purpose trunk road or significant changes to an urban environment consisting of both the trunk road network and local highway network. In addition, any scheme aimed principally at providing a dedicated facility for pedestrians, cyclists or equestrians or a scheme which includes such a facility as part of the original scope of works, shall be deemed to be a large scheme in the context of this process.

- b) A *small scheme* – highway schemes comprising minor changes to an existing all-purpose trunk road, or changes to existing motorway or trunk road junctions that affect the local highway network in a rural area.

Example schemes

- 2.8 The following **Table 2/8** provides guidance for the Lead Assessor for determining whether a scheme should be classified as large or small. Each scheme shall be assessed on an individual basis but the following typical scheme examples are intended to provide an indication of likely classification.

Table 2/8 – Examples of large and small schemes

Example large schemes	Example small schemes
New motorway or all-purpose trunk road construction or major modification of an existing trunk road or motorway junction.	Minor rural all-purpose trunk road junction improvements.
All-purpose trunk road or motorway junction upgrade in existing urban area.	Changes to lane markings, priorities or widths on existing all-purpose trunk roads.
New town or village bypass.	Urban all-purpose trunk road schemes that do not involve changes to the road layout.
Creation of footway, shared use path or cycle track alongside or crossing an existing all-purpose trunk road.	Schemes that solely involve changes to speed limits on all-purpose trunk roads.
Motorway schemes that could affect pedestrians, cyclists and equestrians where the scheme extends as far as the non-motorway network at the end of the slip roads or overbridges, for example.	Emergency motorway diversion signing schemes that involve diverting traffic onto roads where pedestrians, cyclists or equestrians may be present and/or affected.
Route-based improvements on a rural all-purpose trunk road.	Changes to signs aimed at pedestrians, cyclists and equestrians.
Urban all-purpose trunk road schemes involving changes to the road layout.	Schemes affecting lay-bys, including the creation for new lay-bys on the all-purpose trunk road network.
Major rural all-purpose trunk road junction improvements.	Structures schemes affecting a route that could be used by pedestrians, cyclists and equestrians (e.g. motorway bridge parapet replacement).
	All-purpose trunk road speed control schemes (such as horizontal/vertical physical measures, signs).

Walking, Cycling & Horse-Riding Assessment

- 2.9 The Assessment shall be undertaken during the options or concept stage of a highway scheme and shall apply to large and small schemes. The Assessment shall be completed before the commencement of preliminary design activities.
- 2.10 The output of the Assessment shall comprise an Assessment Report which shall be completed before the end of the preliminary design phase of the highway scheme. **Annex B** sets out an illustrative Assessment Report for a large scheme.

Walking, Cycling & Horse-Riding Review

- 2.11 The Review shall be completed as an ongoing review during the various design stages of the highway scheme (but after the completion of the Assessment Report) and shall record the design decisions relating to the provision of Walking, Cycling and Horse-Riding Facilities.
- 2.12 The output of the Review shall comprise the following:
- a) For large schemes – A Review Report at the end of the preliminary design stage and before commencement of detailed design followed by a further Review Report at the end of the detailed design phase (before construction commences).
 - b) For small schemes – A Review Report at the end of the detailed design phase (before construction commences).
- 2.13 Whilst a small scheme shall not require a Review Report at preliminary design stage, a Review Report produced at detailed design stage shall record any walking, cycling & horse-riding-related design team decisions made during the preliminary design stage as well as those made during the detailed design stage. **Annex C** sets out an illustrative Review Report.
- 2.14 If the Lead Assessor considers it appropriate, a Review Report can be produced at the preliminary design stage of small schemes. This shall be highlighted at an early stage in the WCHAR process by the Lead Assessor.

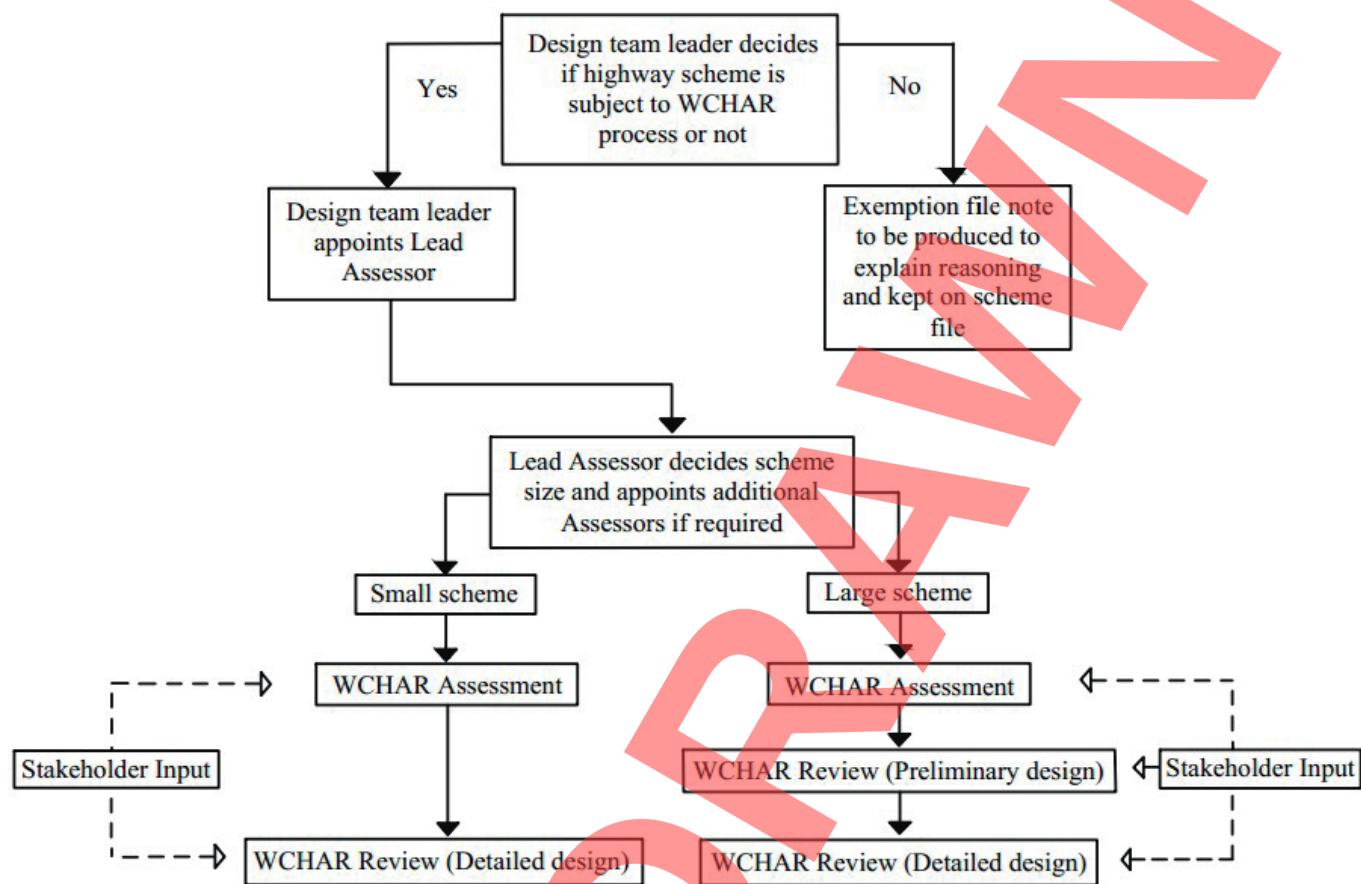
Post-construction

- 2.15 The WCHAR process shall not apply at the post-construction stage of highway schemes. Walking, Cycling & Horse-Riding Facilities should be included within any usual and applicable highway scheme post-completion review process. The Lead Assessor may be involved in such scheme review processes, if appropriate and as part of the design team, but there is no formal requirement for separate reporting within this RAD.

Developer-led and third party organisation-led schemes

- 2.16 The design and WCHAR process for developer-led and third party organisation-led highway schemes can vary from the process for Overseeing Organisation-promoted highway schemes. Most significantly, the scheme may be designed by an organisation working for the developer or third party organisation rather than an organisation working for the Overseeing Organisation.
- 2.17 Where developer-led and third party organisation-led schemes will result in highway schemes on the motorway and all-purpose trunk road network, the Overseeing Organisation shall determine if HD 42/17 applies to each individual scheme.
- 2.18 Where HD 42/17 applies the design organisation shall demonstrate that the process has been applied in accordance with this RAD.

Figure 2/18 – HD 42/17 Process Flow Chart



3. ASSESSMENT AND REVIEW TEAM REQUIREMENTS

Lead Assessor Role

3.1 The Lead Assessor:

- a. Shall be part of the design team for the highway scheme providing advice on Walking, Cycling & Horse-Riding issues.
- b. Shall co-ordinate the activities and resources required as part of the WCHAR process.
- c. Shall demonstrate the competencies needed to complete the process - in line with the guidance set out in **Table 3/2**.

Lead Assessor Competency

3.2 The competencies expected of Lead Assessors are detailed in **Table 3/2** below.

Table 3/2 – Lead Assessor Competencies

Background
An understanding of walking, cycling and horse-riding policies within the UK.
Knowledge of the needs of each user group - pedestrians, cyclists and equestrians and the various sub- groups of these.
Knowledge of current best practice in infrastructure design for all user groups.
Knowledge and an understanding of the planning and operation of walking, cycling and horse-riding networks.
Knowledge of potential issues created by facilities that provide for a combination of users.
Experience
Experience of managing stakeholder consultation events.
Experience of managing conflicting stakeholder views and expectations.
Experience of working on Strategic Road Network highway schemes.
Experience of designing facilities for pedestrians, cyclists and equestrians.
Experience of completing feasibility studies and reviews of walking, cycling and horse-riding infrastructure design.
Assessment Competencies
Knowledge and experience of identifying key trip attractors and subsequent desire lines for pedestrians, cyclists and equestrians.
Experience of the analysis and subsequent interpretation of survey data such as pedestrian count data and automatic cycle count data.

Experience of the assessment of existing routes and facilities used by pedestrians, cyclists and equestrians including condition surveys performed during site visits.
Experience of collision data analysis in the context of providing facilities for pedestrians, cyclists and equestrians.
Experience of being able to make viable and proportionate recommendations for the improvement of facilities.
Knowledge of public transport networks and their operation, including the opportunities and issues arising from potential multi-modal transport options for pedestrians, cyclists and equestrians.
Review Competencies
Experience of presenting options to key stakeholders and promoting the various benefits and dis-benefits of options.
Experience of working as part of a wider design team(s) in order to present and discuss options for enhancing the design for all user groups.

Assessment and Review Team

- 3.3 The Lead Assessor may deem it necessary to be assisted by an additional Assessor(s), particularly for large schemes. This may be beneficial where the Lead Assessor feels there are particularly complex issues for pedestrians, cyclists and equestrians within a highway scheme that require specific specialist knowledge.
- 3.4 The Lead Assessor and any additional Assessors shall record their involvement and specified role in a highway scheme through the Assessment and Review Report documentation.
- 3.5 Whilst additional Assessors are not required to demonstrate any specific competencies, the Lead Assessor shall ensure that the additional Assessor(s) have relevant knowledge and experience for the task they are being asked to undertake.
- 3.6 Members of the WCHAR Assessment and Review Team shall not be permitted to be members of the Road Safety Audit Team, in order to maintain the independence of the Road Safety Audit Team. The Lead Assessor shall be permitted to seek guidance from the Road Safety Audit Team about road safety matters but this should be documented within the Assessment and/or Review Reports.

4. WALKING, CYCLING & HORSE-RIDING ASSESSMENT REQUIREMENTS

General

- 4.1 The aims of carrying out a Walking, Cycling & Horse-Riding Assessment are:
- a) To gain an appropriate understanding of all relevant existing facilities for pedestrians, cyclists and equestrians (users) in the local area.
 - b) To provide background user information that can be referred to throughout the design process.
 - c) To identify opportunities for improvement for users.
- 4.2 Identification of opportunities for improvement shall not necessarily be restricted to the highway scheme extents. In some cases, improvements to facilities outside the limits of the scheme can result in greater improvements to users than an attempt to incorporate dedicated facilities within the scheme extents.
- 4.3 Identification of opportunities for improvement shall be recorded within the Assessment Report, for consideration by the wider design team throughout the design process.

Walking, Cycling & Horse-Riding Assessment Report – information requirements

- 4.4 **Table 4/4** sets out the broad information requirements of large and small schemes. This table is not exhaustive and serves to provide an indication of the likely differences between the content of an Assessment Report for a large and small scheme. An illustrative Assessment Report for a large scheme is provided in **Annex B**.

Table 4/4 – Information requirements for large and small schemes

Information type	Large scheme	Small scheme
Review of walking, cycling & horse-riding policies and strategies relevant to the scheme area.	✓	✓
Collision data – analysis of all collisions in study area.	✓	✓
Description of local public transport service and interchange information.	✓	✓
Description of key trip generators and local amenities.	✓	✓
Evidence of site visit.	✓	✓
Evidence of consultation with key stakeholders.	✓	✓
Description and review of existing walking, cycling & horse-riding network facilities within the local area.	✓	✓
Description and review of existing walking, cycling & horse-riding network facilities at a county wide (strategic) level.	✓	
Collation and analysis of walking, cycling & horse-riding user survey data.	✓	
Evidence of consultation with local user groups and wider public.	✓	

Study area

- 4.5 The Lead Assessor shall define a suitable study area that shall not be smaller than a 1km radius from a small scheme and 5km from a large scheme.

Review of walking, cycling & horse-riding policies and strategies

- 4.6 The Lead Assessor shall review relevant local walking, cycling & horse-riding policies and strategies.
- 4.7 The Lead Assessor shall use the information contained in such documents to help inform the identification of opportunities and incorporate them into the scheme through the WCHAR process.

Collision data

- 4.8 Collision data shall be obtained and analysed to identify collision cluster sites and trends. Analysis of collision data allows the identification of existing problems which may discourage use of a particular site.
- 4.9 Collision data shall not be limited to walking, cycling & horse-riding data only as trends in vehicle collisions can help highlight potential dangers for those users who use the carriageway – particularly at junctions. A full set of collision data shall therefore be obtained to allow the analysis of the on-carriageway issues as well as pedestrian, cyclist and equestrian-specific issues.
- 4.10 Collision data shall be obtained for the latest available period to include a minimum period of three years of data.
- 4.11 Where damage-only collision data is available it should be used to determine trends that may discourage walking, cycling & horse-riding at present, thereby allowing the identification of issues and thus solutions or improvements that would otherwise go undetected when reviewing only personal injury collision data.

Public transport service and interchange information

- 4.12 Pedestrians, cyclists and equestrians may combine their modes of travel with public transport as part of a longer trip. As part of the Assessment, public transport services and associated infrastructure such as rail and bus stations (including bus stops) and interchanges shall be identified to enable an appropriate assessment of the integration of such modes.
- 4.13 Each public transport mode shall be assessed and reported separately within the Assessment Report, highlighting common interchanges or hubs where relevant. Service destinations, frequencies and interchange facilities for users should be reviewed as part of this. Whilst improvements to public transport services lie outside the scope of this RAD, access to and from such services, interchanges and facilities shall be assessed in the context of this RAD and the proposed highway scheme.

Key trip generators and local amenities

- 4.14 The Assessment shall include a review of significant local trip generators and amenities in the area surrounding the highway scheme to identify likely desire lines for pedestrians, cyclists and equestrians. This shall include a review of committed future development in the area.

Site visits

- 4.15 Site visits allow the Lead Assessor and Assessor(s) to identify opportunities that may have otherwise been missed from online mapping or other sources of desktop data collection and are therefore an important part of the Assessment.

- 4.16 The Lead Assessor shall visit the site during the Assessment once a sufficient level of basic background information has been obtained. The Lead Assessor should be accompanied by any additional Assessor(s) where such a role exists.
- 4.17 For small schemes the site visit shall comprise a visit during daylight hours as a minimum.
- 4.18 For large schemes the site visit shall comprise a day and night time visit.
- 4.19 The timing of the site visit shall be determined by the Lead Assessor on a scheme-by-scheme basis. The site visit timing should be influenced by the proximity of certain trip attractors such as schools where the morning and afternoon peak periods are more relevant (due to higher anticipated user flows), for example.

Liaison with key stakeholders

- 4.20 Liaison with key stakeholders shall be undertaken during the Assessment. This shall include the relevant representatives for walking, cycling & horse-riding from all local authorities for which the highway scheme is within or extends across their boundaries.
- 4.21 Liaison with other relevant key stakeholders shall be determined by the Lead Assessor in the context of the highway scheme. Other key stakeholders could include walking, cycling and horse-riding organisations as well as disability groups, local businesses and public transport operators.
- 4.22 The Lead Assessor shall record all key stakeholder liaison within the Assessment Report.

Existing walking, cycling & horse-riding network facilities within the local area

- 4.23 An assessment of the existing user network facilities in the localised area shall contain information on all of the relevant existing user facilities within the study area and include a brief assessment of the current condition and effectiveness.
- 4.24 Each mode of travel shall be assessed in isolation at this stage in order to provide information relevant to each specific mode. The interaction of these modes shall be studied at the Review phase of the process.

Existing walking, cycling & horse-riding network facilities at a strategic level

- 4.25 An assessment of the existing user network facilities within a County or across a town/city-wide area shall be made as part of the large scheme assessment process. This shall include information on all of the main walking, cycling & horse-riding networks within the specified area.
- 4.26 Gaps in existing networks shall be identified where these are in close proximity to the proposed highway scheme so that opportunities for improvement and/or betterment can be identified.
- 4.27 Each mode of travel shall be assessed in isolation at this stage in order to provide information pertinent to each of the modes of walking, cycling & horse-riding. The interaction of these modes shall be studied at the Review phase of the process.
- 4.28 A crucial element of this research is to establish the longer term plans for County and town/city-wide networks. This can be achieved through consultation but also desktop research of publicly available documents such as local authority strategies and plans.

Walking, cycling & horse-riding survey data

- 4.29 The Lead Assessor shall review any existing walking, cycling & horse-riding survey data where this is available (and if collected within the previous 12-month period). This will provide information such as likely desire lines and usage figures that will assist in the completion of the Assessment.

- 4.30 Where it does not already exist, survey data shall be obtained for large schemes only. This data should include, as a minimum, current usage figures for pedestrians, cyclists and equestrians.
- 4.31 The Lead Assessor shall determine the extent and type of survey data to be collected.
- 4.32 Whilst survey data can give a useful snapshot of existing usage patterns, the Lead Assessor shall review the latent demand potential of a Walking, Cycling & Horse-Riding Facility by examining existing usage patterns, likely trip generators in the area and through local key stakeholder consultation. Therefore, justification for improvements shall not be limited to existing usage levels.

Consultation with local user groups and wider public

- 4.33 For large schemes, the Lead Assessor shall consult with local groups such as specific user groups and local access forums. Where the Lead Assessor deems it relevant to consult with the wider public, this shall also be undertaken during the Assessment.
- 4.34 For highway schemes at a confidential stage, where wider public involvement is not considered appropriate, the consultation requirements shall be limited to key stakeholders only for both large and small schemes.

Reporting of different user groups

- 4.35 The Assessment Report shall specify findings for each user group (including user subgroups within these) to demonstrate consideration has been given to all potential users.

Report approval

- 4.36 The Assessment Report shall be signed by both the Lead Assessor and design team leader.
- 4.37 The Lead Assessor shall sign the report to confirm that it contains appropriate background information for the wider design team, in accordance with this RAD.
- 4.38 The design team leader shall sign the report to confirm that the wider design team has been involved in the process and that the competency of the Lead Assessor has been reviewed in accordance with **Table 3/2** of this RAD.
- 4.39 The signed Assessment Report shall be kept on the scheme file.

5. WALKING, CYCLING & HORSE-RIDING REVIEW REQUIREMENTS

General

- 5.1 The aims of carrying out a Walking, Cycling & Horse-Riding Review are:
- a) To review proposals for pedestrians, cyclists and equestrians throughout the highway scheme design process.
 - b) To review the potential impact of the proposed highway scheme on users in the area and on existing facilities.
 - c) To identify new opportunities for improvement (or constraints) for users that may arise from the development of the highway scheme that were not evident during the Assessment phase.

Scope of Review process

- 5.2 In order for this phase of the process to be both meaningful and constructive, the Review shall be undertaken after the initial Assessment phase and once the design team has had opportunity to consider and incorporate the findings from the Assessment Report into the highway scheme design.
- 5.3 The identification of opportunities for improving existing Walking, Cycling & Horse-Riding Facilities or for creating new ones shall not be restricted to those that can be delivered within the context of the highway scheme. Recording the details of such opportunities can prove a useful exercise for the ongoing maintenance and management of the all-purpose trunk road network and can also be shared with key stakeholders such as local highway authorities.
- 5.4 Where a highway scheme is delayed by more than 12 months between the Assessment and Review phases, the Assessment Report shall be revisited and re-issued prior to the Review being undertaken.
- 5.5 An illustrative Review Report for a large scheme is provided in **Annex C** whilst guidance for the initiation and completion of the Review phase is provided below.
- 5.6 As the Assessment and Review Team may change between the Assessment and Review phases of the process, the following items should be confirmed by the Lead Assessor in order for the Review to be able to take place:
- a) Completion of an Assessment Report within the last 12 months.
 - b) The stated scheme size is still relevant.
 - c) The Assessment Report has been signed by the Lead Assessor and design team leader.

Walking, Cycling & Horse-Riding Review Report guidance summary

- 5.7 **Table 5/7** sets out the broad steps required to conduct the Review. This table is not exhaustive and serves to provide an indication of the likely steps involved for large and small schemes. These steps are described in more detail below.

Table 5/7 – Walking, Cycling & Horse-Riding Review steps

Likely steps required for completion of Review Report	For a large scheme (Review required at preliminary and detailed design stages)	For a small scheme (Review required at detailed design stage only)
Review of Assessment Report	✓	✓
Review of preliminary design stage Review Report	✓	N/A
Review of highway scheme proposal	✓	✓
Consultation	✓	✓
Site visits	<i>If necessary</i>	<i>If necessary</i>
Review of steps taken to implement opportunities	✓	✓

Review of Assessment Report

- 5.8 The Assessment Report shall be reviewed at the beginning of the Review phase to ensure that any previously identified opportunities for improvement are considered throughout the Review phase.
- 5.9 Where there is a change in Lead Assessor between the Assessment and Review phases the Lead Assessor shall familiarise themselves with the site by undertaking a site visit before completing the Review phase.

Review of previous Review Report

- 5.10 For large schemes, the preliminary design stage Review Report shall be reviewed during the subsequent detailed design stage Review.

Review of highway scheme proposal

- 5.11 Highway scheme design drawings and associated information shall be reviewed at the appropriate design stages with a specific emphasis on:
- a) ensuring that previously identified opportunities at the Assessment phase have been considered and implemented where achievable.
 - b) identifying opportunities for improvement for pedestrians, cyclists and equestrians as a result of the developing highway scheme design.
- 5.12 All modes and subsequent user groups shall be reviewed at this stage. Each mode should be reviewed in isolation and then in the context of other users – for example how proposed facilities for cyclists will impact pedestrians and other users.

Liaison with key stakeholders

- 5.13 Liaison with key stakeholders at the Review phase of the process is particularly useful in identifying new opportunities and reviewing those resulting from the progression of the highway scheme design. However, liaison at this stage should be targeted in order to prevent unnecessary delay to a highway scheme or a repetition of consultation at the Assessment phase.
- 5.14 The Lead Assessor shall determine the need for liaison with key stakeholders (during the Review phase) for large and small schemes.

Site visits

- 5.15 Site visits shall not be specifically required at the Review phase.
- 5.16 Where new opportunities have been identified as part of the developing highway scheme design, the Lead Assessor shall decide if a further site visit is required.

Steps taken to implement opportunities

- 5.17 Where identified opportunities have resulted in changes to the highway scheme design, the steps taken to implement the opportunities shall be recorded in the Review Report.
- 5.18 Where opportunities have been identified but not implemented, the reasoning for this shall be recorded in the Review Report. This will encourage continuous feedback for future schemes.

Reporting of different user groups

- 5.19 The Review Report shall include a section for each user group (including subgroups within each group) to demonstrate consideration has been given to all potential users.

Report approval

- 5.20 The Review Report shall be signed by both the Lead Assessor and design team leader.
- 5.21 The Lead Assessor shall sign the report to confirm that opportunities for users and improvements to applicable facilities have been reviewed throughout the design process in accordance with this RAD.
- 5.22 The design team leader shall sign the report to acknowledge that the process has been completed at appropriate stages in the highway scheme design as intended. The design team leader also confirms that the wider design team has been involved in the process and that the recorded discussions are a true record.
- 5.23 The signed Review Report(s) shall be kept on the scheme file.

WITHDRAWN

6. APPROVAL

Approval of this document for publication is given by:

Highways England
Temple Quay House
The Square
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Chief Highway Engineer

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BT2 8GB

P B DOHERTY
Director of Engineering

All technical enquiries or comments on this Document should be sent to
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WITHDRAWN

ANNEX A ILLUSTRATIVE EXEMPTION FILE NOTE

Walking, Cycling and Horse-Riding Assessment and Review Exemption File Note

Scheme Name: M99 Controlled Motorway Traffic Improvement Scheme

Scheme Description:

Provision of a controlled motorway scheme between Junction 98 and 99 of the M99 Motorway for a distance of approximately 4 miles. No associated off-highway works or changes to existing junctions or overbridges are proposed. The scheme will provide an improved peak period flow of traffic for drivers of vehicles on the M99 mainline through the use of the existing hard shoulder as a live running lane.

In accordance with HD 42/17 Walking, Cycling and Horse-Riding Assessment and Review I have examined the potential presence of pedestrians, cyclists and equestrians within the extents of the scheme and any potential user impact outside the scheme extents (as a result of the scheme).

For the reasons set out below, the M99 Controlled Motorway Traffic Improvement Scheme is considered exempted from the WCHAR process:

- The entire scheme is located within the motorway extents and will comprise changes to the mainline (motorway) carriageway only; where pedestrians, cyclists and equestrians are not permitted.
- Junctions 98 and 99 of the M99 will not be subject to any changes in relation to this scheme where there could be a potential impact on users.
- No underpasses or overbridges will be affected or altered as a result of the scheme.

Design team leader:

Name: E Questrian IEng, FIHE

Position: Senior Engineer

Organisation: Nonfossil Transportation

Signed:

Date: 01/10/2030

WITHDRAWN

ANNEX B WALKING, CYCLING & HORSE-RIDING ASSESSMENT AND REVIEW

ILLUSTRATIVE WALKING, CYCLING & HORSE-RIDING ASSESSMENT REPORT

A54321 Oxbridge to Liverchester Widening Scheme
Walking, Cycling & Horse-Riding Assessment Report
A54321 Widening Company

December 2030

WITHDRAWN

WITHDRAWN

1. SCHEME DESCRIPTION AND BACKGROUND

Background

The scheme is a highway improvement scheme that will have a permanent impact on the trunk road and local highway networks, therefore the HD 42/17 Walking, Cycling & Horse-Riding Assessment and Review applies. In accordance with HD 42/17, the scale of the scheme has been assessed (by the Lead Assessor) and is considered to qualify as a 'large' scheme for the purposes of this assessment. Therefore the scheme will be subject to a Walking, Cycling & Horse-Riding Assessment (this document) during the options stage of the proposed highway scheme; this will then be followed by Walking, Cycling & Horse-Riding Reviews at the preliminary and detailed design stages.

The original A54321 was built in the 1970s to provide a link between the cities of Oxbridge and Liverchester. Subsequently it has provided a key link in the strategic road network between the A5555 and A6666.

Proposed highway scheme

Scheme title: A54321 Oxbridge to Liverchester Widening.

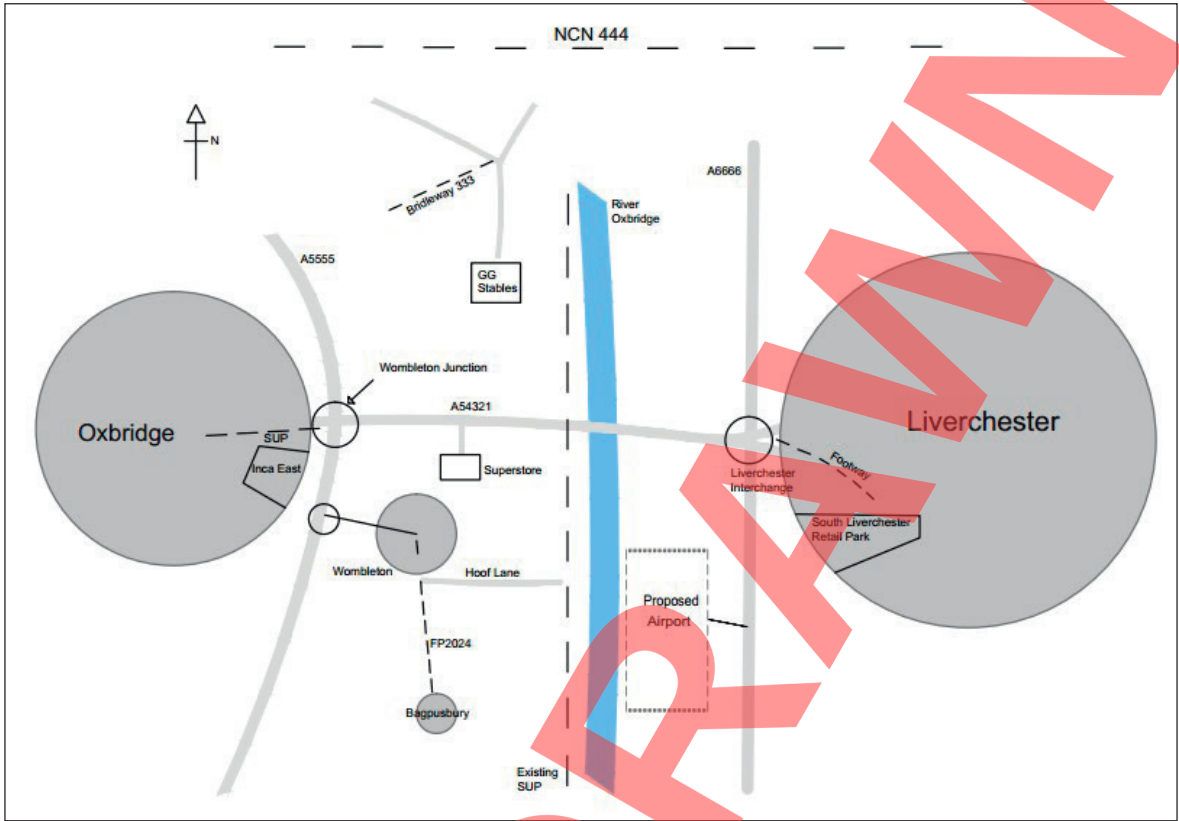
The proposed scheme involves the widening of the A54321 single carriageway to an all-purpose dual carriageway. To the west the A54321 starts at the Wombleton Junction on the outskirts of Oxbridge. To the east it terminates at the Liverchester interchange near Liverchester. The proposed scheme would also include the upgrade of the existing traffic signal-controlled junction on the A54321 at the Morrescodabury's superstore near Wombleton.

The scheme objectives include improving conditions for walking, cycling and horse-riding as the current route has limited facilities and connections for users. This is likely to include allowing for use of the all-purpose dual carriageway and associated infrastructure (such as shared use paths) by pedestrians and cyclists and improving crossings and connecting/adjacent routes wherever possible.

Study area

Figure 1 shows the approximate study area for this Assessment Report. The assessment area has been set by the Lead Assessor and covers the A54321, the west side of Oxbridge, the east side of Liverchester and the small town of Wombleton which is approximately a 5.5km radius from the centre of the scheme. The assessment area also includes the Oxbridge River and the countryside to the north and south of the A54321.

Figure 1 – Study area



2. WALKING, CYCLING & HORSE-RIDING ASSESSMENT

This Chapter summarises the findings of the assessment as set out in Chapter 4 of HD 42/17. The findings under each topic area are summarised in an individual table and any potential opportunities for improvements are noted in each table and then summarised in Chapter 3.

2-1 Review of walking, cycling & horse-riding policies and strategies

The following documents have been reviewed as part of the Assessment:

- a) Liverchestershire Local Transport Plan 2026.
- b) Liverchester Active Travel Strategy 2025.
- c) Liverchester Public Rights of Way Strategy 2025.
- d) National Guidance for Walking 2020.
- e) National Guidance for Cycling 2020.
- f) National Guidance for Horse-Riding 2020.
- g) Oxbridge Active Travel Strategy 2028.
- h) Oxbridge Public Rights of Way Strategy 2028.
- i) Oxbridge Walking and Cycling Design Guidance 2023.

It is noted that Liverchester has an ongoing dedicated funding programme for improvements to the local cycling network (Liverchester Active Travel Strategy 2025).

2-2 Collision data

Personal injury collision data has been provided for the entire length of the A54321 between Wombleton Junction and the Liverchester interchange. The data covers the five years between January 2024 and December 2029 provided by Personal Injury Collision Data Supply Services Ltd. During this time there were 160 slight injury collisions and 50 serious injury collisions. None of the collisions involved cyclists, equestrians or pedestrians. Damage-only collision data was not available at the time of the Assessment.

Analysis of the data has revealed that a high number of side-swipe collisions have occurred at the Wombleton roundabout junction. Whilst the collision data suggests that no cyclists have been injured in the previous 5 year period, anecdotal evidence (from local authority staff as recorded in minutes of a meeting held on Wednesday 11th December 2030) suggests a high number of near-misses and damage-only collisions between vehicles and cyclists.

[A map may be of use here to illustrate the locations of collisions]

2-3 Public transport services and interchange information

Ox-LiverBus Company operates the X99 service between Liverchester and Oxbridge. The service runs each day of the week and is generally every twenty minutes during daytime and hourly during the evenings. At weekends the service runs every half hour on Saturday and every hour on Sunday during the day. Bus stops are located on the Liverchester and Oxbridge sides of the two scheme terminal junctions.

There is a bus interchange in the Morrescodabury's superstore car park that provides a bus stop for the X99 service. This is the only bus stop along the A54321. The interchange provides a small shelter outside the superstore and there are toilet and café facilities within the store that are available to interchange users.

There are no rail facilities in the immediate vicinity of the scheme, but National Cycle Network (NCN) Route 444 provides a direct route to the nearest rail station 4.6km away. There is a missing (traffic free) link between the NCN Route 444 (a traffic free route between Liverchester, Oxbridge and Glasburgh) and Liverchester Interchange.

[A map may be useful here to show key public transport routes and interchanges]

2-4 Trip Generators

Key trip generators and local amenities

There are a wide variety of trip generators in the vicinity of the proposed improvements that could be attractive to pedestrians, cyclists and equestrians, including:

- a) Inca East Business Park on the outskirts of Oxbridge.
- b) Hotels and Restaurants in Oxbridge and Liverchester.
- c) Sports and Health Clubs in Oxbridge and Liverchester.
- d) Retail Units, especially the Morrescodabury's superstore. There is also a retail park on the outskirts of Liverchester close to the Liverchester Interchange.
- e) GG Stables.
- f) Liverchester Sixth Form College.
- g) Oxbridge University.

These are shown on the map below:

[A map may be useful here to highlight key trip generators and amenities]

Future trip generators

The Liverchestershire Core Strategy has a small area of residential development identified on the northern edge of Wombleton. In addition, a large industrial area expansion to the South of Oxbridge is planned for 2031 which is likely to support 4500 jobs. This suggests that walking and cycling trips between Liverchester / Oxbridge and the south of Oxbridge could increase significantly.

The former RAF base at Chigley Green, south of the A54321 and between the Oxbridge River and the A6666, has been identified in the Liverchester Core Strategy for development as an airport. Whilst significant further work will be required to deliver this development the A54321 Widening scheme should take account of the likely future implications. The main access for pedestrians and cyclists to the proposed airport (primarily for airport staff commuting) would be expected to be from the A54321 despite the main vehicular access being from the A6666.

2-5 5 Site Visit

The site visit was undertaken by Penny Destrian (Lead Assessor) and Si Clyst (Assessor) on Thursday 12th December 2030 between 16:00 and 19:00 during daylight and darkness hours. The site visit took the form of walking and cycling along all available pedestrian, cyclist and equestrian facilities within the extents of the scheme. Other walking, cycling & horse-riding routes within the vicinity of the scheme, including National Cycle Network (NCN) Route 444, were also visited during the site visit. The level of use and condition/suitability of each route during the site visit were recorded and potential improvements, repairs and connections were noted. The weather during the site visit was dry and overcast with the temperature between 5 and 10 degrees Celcius. The road and path surfaces were all noted to be dry.

The primary findings of the site visit were:

- a. Evidence of horse riders using the shared use path alongside the Oxbridge River.
[A site visit photo should be inserted here if applicable]
- b. Three cyclists observed using the existing A54321 carriageway to the west of the superstore junction.
[A site visit photo should be inserted here if applicable]
- c. Two pedestrians and four cyclists observed travelling between the superstore and Liverchester Interchange along the existing footway.
[A site visit photo should be inserted here if applicable]
- d. Three passengers waiting at the transport interchange at the superstore, all waiting for a X99 bus to Oxbridge.
[A site visit photo should be inserted here if applicable]
- e. Evidence of regular pedestrian use of the shared use path alongside the Oxbridge River and the footpath between Wombleton and Bagpusbury although the latter facility was muddy and overgrown in places. The shared use path alongside the Oxbridge River was in good condition and approximately 3.0m wide throughout, except under the A54321 bridge where the width is reduced to 2.0m.
[A site visit photo should be inserted here if applicable]
- f. Evidence of pedestrians walking along the southern A54321 verge between the superstore and the Wombleton Junction.
[A site visit photo should be inserted here if applicable]

2-6 Consultation with key stakeholders

A liaison meeting was held with the Liverchestershire County Council Walking, Cycling & Horse-Riding Officer on Wednesday 11th December 2030. Existing pedestrian, cyclist and equestrian facilities within the overall vicinity of the proposed scheme were discussed and recorded. In addition, the meeting was used to explore planned and aspirational routes, connections and other facilities for the benefit of pedestrians, cyclists and equestrians. The information gathered has been incorporated into other sections of this report although minutes of the meeting are held on project files to record the items discussed.

- a) A meeting was also held with the owner of GG Stables to the north of the A54321. At present it is understood that equestrians are using the shared use path alongside the Oxbridge River to access Hoof Lane although this is not desirable for a number of reasons (recorded in minutes of a meeting held on Tuesday 10th December 2030). Primarily these focussed upon the lack of separation between the route and the river and the low headroom and low lighting in the underpass.
- b) A meeting was also held with Breakwell's Biscuits of Liverchester. Breakwell's Biscuits recently conducted a survey amongst staff to ascertain existing and potential levels of cycling as part of Bike Week. The survey data revealed the following key information:
 - Existing levels of cycling to work were 12% amongst all staff.
 - 33% of staff want to commute to work on bike from the Oxbridge area but currently are put off by the 'dangerous' A54321 and lack of dedicated cycle facilities.
 - Of those who currently cycle, 92% said that the Liverchester Interchange presented significant problems for them in terms of negotiating the junction safely.

[Key correspondence could be appended to the Assessment Report for future reference]

2-7 7 Existing pedestrian, cyclist and equestrian facilities within the local area

The following pedestrian, cyclist and equestrian facilities within the scheme extents have been identified:

Pedestrian Facilities

- a) Footway (approximately 1.7m wide) between the Morrescodabury's superstore and the Liverchester interchange.
- b) Signalised pedestrian crossing at the Morrescodabury's superstore junction. It was noted during the site visit that the green time for the crossing is very short which could present a problem for vulnerable pedestrians such as the elderly or those with mobility impairments.
- c) Footway (less than 2m wide) between Morrescodabury's superstore and Footpath 2024 to Wombleton, via Bagpusbury.

Cyclist Facilities

- a) There are no dedicated off-road facilities within the scheme extents. An advisory cycle lane of 1.5m width is provided on the northern side (eastbound) of the A54321 only, with Advanced Stop Lines provided at the existing junctions between Liverchester and Oxbridge.

Equestrian Facilities

- a) There are no dedicated equestrian facilities within the scheme extents. However, equestrians have been observed to be using the shared use path under the A54321 (alongside the Oxbridge River).

[A map may be useful here to highlight key facilities in the local area]

2-8 8 Existing pedestrian, cyclist and equestrian facilities beyond scheme extents and links to County /strategic networks

The following pedestrian, cyclist and equestrian facilities outside the immediate scheme extents, but within the study area, have been identified:

Pedestrian and Cyclist Facilities

- Footpath 2024 to Wombleton, via Bagpusbury.
- Shared use path alongside Oxbridge River.
- NCN Route 444.
- Shared use path between Wombleton junction and Oxbridge city centre along Liverchester Road.
- Footway from Liverchester interchange into Liverchester along Wombleton Road.

Equestrian Facilities

- Bridleway 333 beyond GG Stables.
- Shared use path alongside the Oxbridge River – evidence of equestrian use.
- Hoof Lane (public highway).

These are shown on the map below:

[A map may be useful here to highlight strategic user networks]

Pedestrian, cyclist and equestrian survey data

- Traffic flow data has been provided by Traffic Flow Data Supply Services Ltd and is shown in Appendix B.
- A survey of the numbers of pedestrians, cyclists and equestrians on or around the A54321 was undertaken on four days in December 2030 by Walking, Cycling & Horse-Riding Survey Data Supply Services Ltd. Details are provided in Table 2-1 below.

Table 2-1: Walking, cycling & horse-riding user survey data gathered in December 2030

Location	Weekday			Weekend			Total
	Pedestrian	Cycle	Equestrian	Pedestrian	Cyclist	Equestrian	
Shared Use Path Wombleton junction	21	64	0	10	22	0	117
Oxbridge River SUP	4	12	2	44	73	5	140
Morrescodabury's Superstore junction	52	14	0	35	9	0	110
Liverchester interchange	25	18	0	6	4	0	53

The following is a summary of the main points from the data:

- There is light equestrian use on the Oxbridge River shared use path whilst there are significantly higher pedestrian and cyclist flows on the same route at weekends. This suggests it is primarily used as a recreational route.
- Wombleton Junction and Liverchester Interchange were both used more frequently during weekdays than weekends by pedestrians and cyclists. This indicates that the use is more likely to be commuting than recreational.
- The superstore junction was well used by pedestrians throughout the week and more lightly used by cyclists.
- No equestrian use was recorded at the survey sites along the A54321.

[Key survey data could be appended to the Assessment Report for future reference]

2-9 Consultation with local user groups and wider public

The following local user groups were consulted:

- Wheelz Cycling Club of Liverchester
- Oxbridge Running Club
- Pony Trek Tours of Liverchestershire

A public exhibition was held at Liverchester City Hall on Friday 13th December 2030. Forty- two members of the public were recorded as attending the event throughout the day and fifteen responses were received to a questionnaire devised to identify the stating existing barriers to walking, cycling & horse-riding that users face in the local area (relevant to the scheme extents).

The highlighted issues included:

- The A54321 was described by the majority of responders as ‘dangerous’ for cyclists in its current form.
- The experience of using footways alongside the A54321 was described as ‘unpleasant’ due to HGVs travelling close to the narrow footway.
- Several responders felt that the A54321 was a major severance for pedestrians, cyclists and equestrians travelling between Liverchester and Oxbridge. Of these, a high proportion of disabled users mentioned that the gradient of the existing shared use path immediately underneath the A54321 was steep and prohibited access for them.

[Key correspondence could be appended to the Assessment Report for future reference]

3. USER OPPORTUNITIES

The opportunities highlighted below are considered to be relevant to the highway scheme and should be considered by the wider design team throughout the progression of the scheme design in addition to any further opportunities that may arise through the ongoing development of the design phase(s).

General
Opportunity 1: Improvements identified as part of the WCHAR process could benefit from matched funding initiatives in conjunction with key stakeholders. (2-1)
Strategic opportunities
Opportunity 2: Completion of the missing (traffic free) link between NCN Route 444 (north of Liverchester) and Liverchester Interchange to provide access to the interchange would allow users to access the interchange and thus Liverchester itself without having to use the existing on-road alignment via Oxbridge. (2-3)
Opportunity 3: Incorporation of specific facilities along the A54321 as part of the Highway Improvement Scheme would 'future-proof' the scheme for pedestrians, cyclists and equestrians. Facilities at the Wombleton Junction should take account of the potential increase in movements to and from the development. (2-4)
Opportunity 4: A high quality future link from the A54321 to the proposed airport would be of significant benefit to commuting pedestrians and cyclists. Therefore the design of the proposed A54321 widening scheme should ensure that a future link is not compromised. (2-4)
Opportunity 5: Formalising an existing pedestrian desire line along the southern A54321 verge between the superstore and the Wombleton Junction to improve user convenience and road safety along the A54321. (2-5)
Opportunity 6: Increasing the width of the shared use path under the A54321 would benefit all users. (2-5)
Pedestrian specific opportunities
Opportunity 7: Conversion of the existing footways to shared use paths (with associated widening measures and junction crossing revisions) along the A54321 between Liverchester and Oxbridge would benefit pedestrians when compared with the existing footway provision. This would be particularly beneficial for more vulnerable pedestrians such as the elderly and those with pushchairs although care should be taken to ensure use by other modes. (2-7)
Opportunity 8: The gradient of the existing shared use path alongside the Oxbridge River should be examined and options sought to improve this for disabled user access. (2-9)

Cyclist specific opportunities
Opportunity 9: A dedicated cycle facility at the Wombleton junction to reduce the risk of cyclists being struck by a vehicle at the Wombleton junction. Consideration to be given to both on and off-carriageway facilities given that cyclists are likely to make use of both types of facility at this location. (2-2)
Opportunity 10: Conversion of the existing footways to shared use paths (with associated widening measures and junction crossing revisions) along the A54321 between Liverchester and Oxbridge would provide a benefit for the less confident cyclist. (2-7)
Opportunity 11: An improvement to the A54321 for cyclists would encourage greater levels of walking, cycling amongst staff at Breakwell's Biscuits, a major employer in Liverchester. (2-6)
Equestrian specific opportunities
Opportunity 12: The provision of lighting and increased forward visibility at the A54321 subway to improve the environment for equestrians. (2-5)
Opportunity 13: An alternative connection between GG Stables and Hoof Lane for equestrians would help alleviate the increased severance and area of shadow that would be created by the proposed Oxbridge River structure. (2-6)

4. WALKING, CYCLING & HORSE-RIDING ASSESSMENT TEAM STATEMENT

As Lead Assessor, I confirm that this Walking, Cycling & Horse-Riding Assessment Report has been compiled in accordance with DMRB HD 42/17 and thus contains the appropriate information for the wider design team. The Walking, Cycling & Horse-Riding Assessment was undertaken by the following Assessment and Review Team:

Walking, Cycling & Horse-Riding Lead Assessor

P Destrian BSc (Hons), MCIHT, CMILT
Principal Consultant
Nonfossil Transportation

Signed:

Date:

Walking, Cycling & Horse-Riding Assessor

Si Clyst BEng, MSc (Eng), CEng, MICE, MCIHT
Consultant
Nonfossil Transportation
Provided specific cycling expertise.

As design team leader I confirm that the assessment has been undertaken at the appropriate stage of scheme development and that the wider design team has been involved in the process.

I confirm that in my professional opinion the appointed Lead Assessor has the appropriate experience for the role making reference to the expected competencies contained in HD 42/17.

Design team leader

E Questrian IEng, FIHE
Senior Engineer
Nonfossil Transportation

Signed:

Date:

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ANNEX C WALKING, CYCLING & HORSE-RIDING ASSESSMENT AND REVIEW

ILLUSTRATIVE WALKING, CYCLING & HORSE-RIDING REVIEW REPORT

A54321 Oxbridge to Liverchester Widening Scheme

Walking, Cycling & Horse-Riding Review Report (Detailed
Design Stage)

A54321 Widening Company

December 2032

WITHDRAWN

WITHDRAWN

1. SCHEME DESCRIPTION AND BACKGROUND

Background

The scheme is a highway improvement scheme that will have a permanent impact on the trunk road and local highway networks. HD 42/17 Walking, Cycling & Horse-Riding Assessment and Review therefore applies.

In accordance with HD 42/17, at the Walking, Cycling & Horse-Riding Assessment stage, the scale of the scheme was judged (by the Lead Assessor) to qualify as a large scheme for the purposes of the Assessment. The scheme size has been reviewed and is considered still to be appropriate.

Following the production of a Walking, Cycling & Horse-Riding Assessment Report in December 2030, a Walking, Cycling & Horse-Riding Review was undertaken at the preliminary design stage with a report completed in June 2031. This Review Report presents the findings of the Walking, Cycling & Horse-Riding Review undertaken throughout the detailed design stage of the project. The preceding Assessment and Review reports have been subject to the appropriate approval processes.

The original A54321 was built in the 1970s to provide a link between the cities of Oxbridge and Liverchester. Subsequently it has provided a key link in the strategic road network between the A5555 and A6666.

Proposed highway scheme

Scheme title: A54321 Oxbridge to Liverchester Widening.

The proposed scheme involves the widening of the A54321 single carriageway to an all-purpose dual carriageway. To the west the A54321 starts at the Wombleton Junction on the outskirts of Oxbridge. To the east it terminates at the Liverchester interchange near Liverchester. The proposed scheme would also include the upgrade of the existing traffic signal-controlled junction on the A54321 at the Morrescodabury's superstore near Wombleton.

The scheme objectives include improving conditions for walking, cycling and horse-riding. This is likely to include allowing for use of the all-purpose dual carriageway by pedestrians and cyclists and improving crossings and connecting/adjacent routes wherever possible.

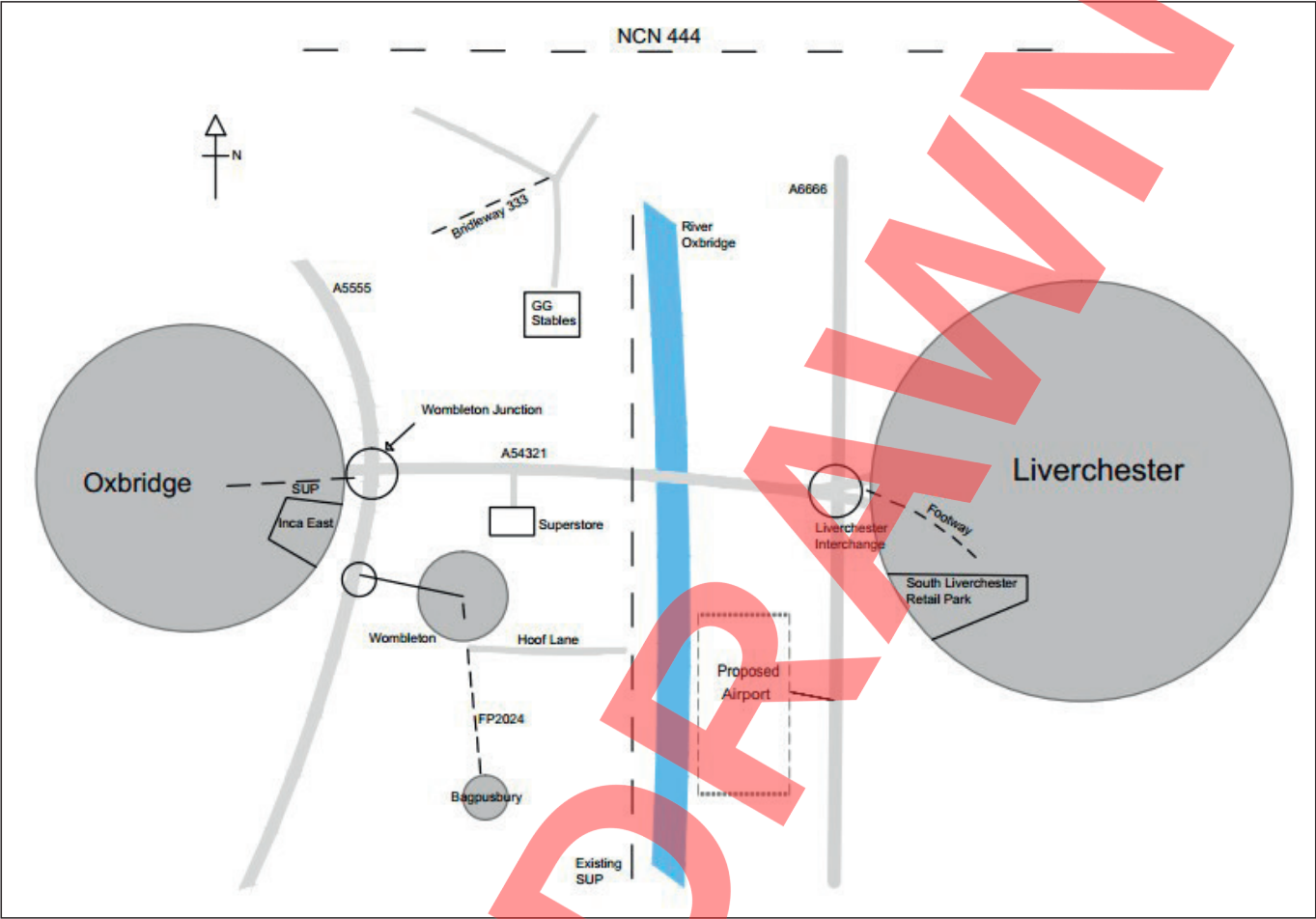
Review Team

The Lead Assessor at the preliminary design stage Review has since retired. A new Lead Assessor has been appointed for this detailed design stage Review and has therefore conducted a site visit for familiarisation purposes.

Study area

Figure 2.1 shows the approximate study area for this Assessment Report. The study area has been set by the Lead Assessor and covers the A54321, the west side of Oxbridge, the east side of Liverchester and the small town of Wombleton which is approximately a 5.5km radius from the centre of the scheme. The study area also includes the Oxbridge River and the countryside to the north and south of the A54321.

Figure 2.1 Study area



2. REVIEW OF WALKING, CYCLING & HORSE-RIDING ASSESSMENT OPPORTUNITIES

This chapter provides a summary of the opportunities identified as part of the Assessment Report and the actions taken or outcomes related to these during the preliminary design phase of the highway scheme. They are provided verbatim from the Review Report issued at the end of the preliminary design phase of the highway scheme.

General opportunities
<p>Assessment Opportunity 1: Improvements identified as part of the WCHAR process could benefit from match funding initiatives in conjunction with key stakeholders.</p> <p>Action Taken/Outcome: Opportunities were identified for matched funding from central government and the local highway authority. This has been utilised in the overall scheme funding, specifically to enhance pedestrian, cyclist and equestrian facilities.</p>
Strategic opportunities
<p>Assessment Opportunity 2: Completion of the missing (traffic free) link between NCN Route 444 (north of Liverchester) and Liverchester Interchange to provide access to the interchange would allow users to access the interchange and thus Liverchester itself without having to use the existing on-road alignment via Oxbridge.</p> <p>Action Taken/Outcome: A link of appropriate standard has been incorporated into the detailed scheme design to address this missing link.</p>
<p>Assessment Opportunity 3: Incorporation of specific facilities along the A54321 as part of the Highway Improvement Scheme would 'future-proof' the scheme for pedestrians, cyclists and equestrians. Facilities at the Wombleton Junction should take account of the potential increase in movements to and from the development.</p> <p>Action Taken/Outcome: A shared use path and footway have been included in the detailed scheme design.</p>
<p>Assessment Opportunity 4: A high quality future link from the A54321 to the proposed airport would be of significant benefit to commuting pedestrians and cyclists. Therefore the design of the proposed A54321 widening scheme should ensure that a future link is not compromised.</p> <p>Action Taken/Outcome: The scheme has been designed to be able to accommodate a future shared use path link between the A54321 and the proposed airport development. The airport development is progressing more quickly than anticipated at the time of the Assessment and therefore the design team has been carrying out regular liaison with the developer and planning authority.</p>

<p>Assessment Opportunity 5: Formalising an existing pedestrian desire line along the southern A54321 verge between the superstore and the Wombledon Junction to improve user convenience and road safety along the A54321.</p> <p>Action Taken/Outcome: Appropriate facilities have been incorporated into the detailed scheme design to align with this opportunity.</p>
<p>Assessment Opportunity 6: Increasing the width of the shared use path under the A54321 would benefit all users.</p> <p>Action Taken/Outcome: The span of the Oxbridge River structure has been increased to allow for a 3m wide shared use path with appropriate forward visibility and more natural lighting.</p>
<p>Pedestrian facilities</p>
<p>Assessment Opportunity 7: Conversion of the existing footways to shared use paths (with associated widening measures and junction crossing revisions) along the A54321 between Liverchester and Oxbridge would benefit pedestrians when compared with the existing footway provision. This would be particularly beneficial for more vulnerable pedestrians such as the elderly and those with pushchairs although care should be taken to ensure use by other modes.</p> <p>Action Taken/Outcome: Conversion of the footways to 3m-wide shared use paths has been incorporated into the detailed design.</p>
<p>Assessment Opportunity 8: The gradient of the existing shared use path alongside the Oxbridge River should be examined and options sought to improve this for disabled user access.</p> <p>Action Taken/Outcome: An overbridge is proposed to replace the subway with approach ramps of appropriate gradient. This will remove the issue of poor disabled pedestrian access.</p>
<p>Cyclist facilities</p>
<p>Assessment Opportunity 9: A dedicated cycle facility at the Wombledon junction to reduce the risk to cyclists of being struck by a vehicle at the Wombledon junction. Consideration to be given to both on and off-carriageway facilities given that cyclists are likely to make use of both types of facility at this location.</p> <p>Action Taken/Outcome: This junction is part of the local highway network. Through further liaison with the local highway authority it has been determined that there has been a long-term aspiration to improve this junction for cyclists and proposals are understood to be under development. The Design team has communicated the proposals for the A54321 to the local highway authority throughout this process to ensure that the facilities across the two schemes are consistent and continuous.</p>
<p>Assessment Opportunity 10: Conversion of the existing footways to shared use paths (with associated widening measures and junction crossing revisions) along the A54321 between Liverchester and Oxbridge would provide a benefit for the less confident cyclist.</p> <p>Action Taken/Outcome: Conversion of the footways to 3m-wide shared use paths has been incorporated into the detailed design, along with appropriate crossing points.</p>

Assessment Opportunity 11: An improvement to the A54321 for cyclists would encourage greater levels of walking and cycling amongst staff at Breakwell's Biscuits, a major employer in Liverchester.

Action Taken/Outcome: Shared use paths are proposed as part of the scheme which will enable off-carriageway access to Breakwell's Biscuits. Changes to the interchange to facilitate off-carriageway negotiation of Liverchester Interchange are also to be incorporated in to the detailed design of the scheme.

Equestrian facilities

Assessment Opportunity 12: The provision of lighting and increased forward visibility at the A54321 subway would improve the environment for equestrians.

Action Taken/Outcome: Extensive liaison was carried out with representatives of the local horse-riding community about this matter. See below for further details.

Assessment Opportunity 13: An alternative connection between GG Stables and Hoof Lane for equestrians would help alleviate the increased severance and area of shadow that would be created by the proposed Oxbridge River structure.

Action Taken/Outcome: Due to the length of the proposed underbridge, extensive liaison with the local horse-riding representatives was undertaken and identified that an overbridge would be more appropriate due to flooding and lighting issues. A new overbridge to carry the shared use path over the widened A54321 has been incorporated into the detailed design. The local authority is in the process of amending the nature of the route to formally provide for equestrians. The new overbridge will have ramps, steps and parapets designed in accordance with current walking, cycling & horse-riding design guidance.

WITHDRAWN

3. PRELIMINARY DESIGN STAGE WALKING, CYCLING & HORSE-RIDING REVIEW OPPORTUNITIES

This chapter documents any additional user related opportunities identified during the preliminary design phase (after the Assessment Report had been issued). They have been developed through discussions between the Lead Assessor and the wider design team and recorded here (along with actions taken / outcomes) verbatim from the previously issued Review Report produced at the end of the preliminary design phase of the highway scheme.

Strategic opportunities

Preliminary Design Stage Opportunity: During the preliminary design stage, recently- confirmed future development at Wembleton has been identified as a likely future trip generator for pedestrians, cyclists and equestrians. There is an opportunity to allow for this future use in the walking, cycling & horse-riding element of the proposed highway scheme.

Action Taken/Outcome: The highway scheme design was adjusted during the preliminary design phase such that a future junction on the A54321 to serve this development would have the best possible connectivity to the network of Walking, Cycling and Horse-Riding Facilities.

Pedestrian and cyclist opportunities

Opportunity: Design development has identified that the widening of the A54321 would have some negative impacts upon the footways and shared use paths in the vicinity of the Morrescodabury's superstore junction.

Action Taken/Outcome: The signalised junction at the Morrescodabury's superstore has been significantly re-designed to simplify the walking and cycling routes. Larger waiting areas will be provided and there will be fewer crossings required for all the walking and cycling routes through the junction. The traffic signal design has also been amended to minimise delays to both pedestrians and cyclists as well as vehicle users. Signs have also been incorporated to provide clear direction for pedestrians and cyclists.

Opportunity: Evidence of vehicles parking on the Liverchester Interchange perimeter, highlighted a concern that a proposed raised kerb alone may not be sufficient to prevent this continuing. There is an opportunity to protect pedestrians and cyclists from vehicles at this location. See figure 1 below.

Action Taken/Outcome: The detailed design has included an increase to the original proposal of 160mm kerbs. Additional parking restrictions or the potential of other measures to deter parking.



Figure 1: Evidence of parking on roundabout.

Opportunity: The existing west kerblin access to the crossing point on the splitter island north of the Liverchester Interchange is very steep, and may currently cause wheels of mobility scooters or similar to become stuck at the kerblin in a location where traffic levels are heavy and crossing opportunities are limited. There is an opportunity to improve this facility for all pedestrians and cyclists, particularly those in powered and manual wheelchairs. See Figure 2 below.

Action Taken/Outcome: Proposals for the access on the west kerblin will address this problem.



Figure 2: Steep access at kerblin.

Opportunity: The proposed shared use path design was to be achieved by widening towards the carriageway, resulting in a reduced separation between the path and the live traffic lane. It is recommended that separation for a traffic-free path should be 'as remote as possible' from an adjacent highway as space permits for reasons of safety and comfort. See Figure 3 below.

Action Taken/Outcome: A proposed separation of 1.5m has been incorporated during the detailed design stage.



Figure 3: View north showing proximity of path to highway.

Equestrian opportunities

Liaison with the representatives of local equestrian groups confirmed that the key issue would be improvements to the route at the Oxbridge River crossing and therefore no further opportunities were identified within the scope of the scheme. Discussions are ongoing with the local authority Public Rights of Way team regarding routes connecting to the Oxbridge River SUP.

WITTHDRAWN

4. DETAILED DESIGN STAGE WALKING, CYCLING & HORSE-RIDING REVIEW

This chapter documents any user related opportunities identified during the detailed design phase only (after the Assessment Report and preliminary design phase Review Report had been issued). They have been developed through discussions between the Lead Assessor and the wider design team and recorded here (along with actions taken / outcomes).

It also includes new opportunities for improvement identified by the new Lead Assessor who joined the design team between the preliminary and detailed design stages of the project.

Pedestrian facilities
<p>Opportunity: Guard-railing is to be provided on pedestrian facilities at various locations through the scheme. The Stage 1 Road Safety Audit Report identified concerns with the proposed pedestrian guard railing.</p> <p>Whilst guard-railing can provide benefits to pedestrians there can be an accompanying loss of clear visibility between the pedestrians and vehicle users. There is an opportunity to utilise 'high visibility' guard-railing in the proposals.</p> <p>Action Taken/Outcome: Where guard-railing has been included in the design, a high-visibility version has been specified.</p>
Cyclist facilities
<p>Opportunity: As part of ongoing stakeholder discussions with the local highway authority, it has been decided to include the local tourist destinations on a proposed new ADS sign over the shared use path.</p> <p>Whilst of benefit to drivers, it has been noticed that one of the posts for the sign would be located in the centre of the shared use path and would therefore provide a hazard to pedestrians and cyclists, particularly at night and for the visually impaired. Further, the proposed mounting height was considered to be too low for cyclists.</p> <p>Action taken / outcome: The proposed ADS sign and its mounting posts have been redesigned such that they do not need to be placed on the shared use path and provide more than the minimum required headroom for cyclists.</p>
<p>Opportunity: A free-flowing wide spiral design of the shared use connection between the A54321 and the Oxbridge River shared use path would provide good visibility and ease of connection for cyclists in particular.</p> <p>Action Taken/Outcome: Avoiding a nearby electricity pylon and sub-station proved too complex and thus a set of linear ramps and landings have been incorporated in to the design with appropriate gradients and landing areas.</p>

WITHDRAWN

5. WALKING, CYCLING & HORSE-RIDING REVIEW TEAM STATEMENT

As Lead Assessor, I confirm that this Walking, Cycling & Horse-Riding Review Report has been compiled in accordance with DMRB HD 42/17 and thus records all design team deliberations and decisions relating to Walking, Cycling & Horse-Riding issues and opportunities.

The Walking, Cycling & Horse-Riding Review was undertaken by the following team:

Walking, Cycling & Horse-Riding Lead Assessor

Ivor Tandem BSc (Hons), MCIHT, CMILT
Principal Consultant
Nonfossil Transportation

Signed:

Date:

Walking, Cycling & Horse-Riding Assessor

Si Clyst BEng, MSc (Eng), CEng, MICE, MCIHT
Consultant
Nonfossil Transportation

As design team leader I confirm that the assessment has been undertaken at the appropriate stage of scheme development and that the wider design team has been involved in the process.

I confirm that in my professional opinion the appointed Lead Assessor has the appropriate experience for the role making reference to the expected competencies contained in HD 42/17.

Design team leader

E Questrian IEng, FIHE
Senior Engineer
Nonfossil Transportation

Signed:

Date:

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