

KCC POLICY FOR SAFETY AUDIT 2004:

“The County Council will subject all works on its highway at both design and implementation stages, to a Safety Audit forming part of an overall scheme appraisal. The requirement and the nature of the Safety Audit is dependent upon the characteristics of the scheme and as determined by the Highway Authority.”

THE SAFETY AUDIT OF WORKS ON KCC'S HIGHWAYS (TABLE 1)

SCHEME TYPE	REQUIREMENT	METHOD
KCC Major capital projects	Safety Audit to be done in accordance with HD19/03 unless specifically instructed otherwise and in writing by the appropriate Divisional Director(s) or authorised representative.	Included as part of the commissioned works using a KCC approved body. The above to form part of the overall scheme appraisal.
Developer funded Schemes (Section 278 works and Section 38 works)	Safety Audit to be done in accordance with HD19/03 unless specifically instructed otherwise and in writing by the Divisional Manager (or authorised representative) in which case the safety audit should be in accordance with “KCC Guidance Note on the Provision of Safety Audit”	Provided by the developer using a KCC approved body and included as supporting information in the KCC Developer Scheme Appraisal Process.
All schemes that alter the highway layout, other than major capital project and developer funded schemes.	A safety audit to be done in accordance with the “KCC Guidance note on the provision of safety audit. The Divisional Manager (or authorised representative) may, as is considered necessary, require a safety audit to HD19/03 to be carried out.	The Divisional Manager (or authorised representative) to instruct the scheme designer/manager to provide a safety audit to comply with “KCC Guidance note on the provision of Safety audits” or a safety audit to HD19/03. The above to

Note:

1. Monitoring of standard & consistency of safety auditing carried out by KCC Road Safety Group, in accordance with Kent County Guidance Note for the provision of Safety Audit.

2. Safety Review within Technical Appraisal - Where a developer scheme is technically assessed. This assessment to include a safety review. The Technical Assessor is to: decide whether the audit meets the stated standard and note discrepancies where it does not; to comment on the workability of the recommendations; and, note any areas which in their opinion have safety implications but have not been commented on. It is desirable that the technical assessor has completed a safety audit course (PTRC/TMS Consultancy or similar approved).

3. Safety Audit Consultants included as part of the existing approved Consultant's list.

Kent County Council
Guidance Note for the provision of Safety Audit
For use by Kent Highway Services.

1. INTRODUCTION

1.1 These guidance notes have been produced in response to the change in the provision of safety audit as a result of the latest DfT standard for *Safety Audit HD19/03. DMRB VOL 5 – Section 2 Preparation and Implementation* which can be assessed on <http://www.standardsforhighways.co.uk/dmrb/vol5/section2/hd1903.pdf>. The reason for the changes and means of delivery are detailed in the Highway Advisory report approved on 11 May 2004 (Decision Number 04/00483).

1.2 Schemes on roads for which KCC is the highway authority must receive a safety audit as described in the A4 sheet "**KCC POLICY FOR SAFETY AUDIT 2004**".

1.3 Schemes designed and implemented by Kent Highway Services will be required to provide a safety audit in accordance with the guidance contained within this note.

1.4 This guidance note is not generally intended for use in the provision of safety audit for major capital projects which are subject to individual commissions to HD19/03, nor is it intended for Section 278 and Section 38 agreement schemes. The developer is responsible for submitting the designed and implemented scheme for approval by the highway authority at the appropriate stages with a completed safety audit and confirmation of resultant action. KCC requires the developer to provide a safety audit to DfT's latest standard HD19/03 issued in November 2003. The developer (or his consultant) in this instance is deemed by KCC to be the Project Sponsor (paragraph 1.26 in HD19/03) as he ensures that an appropriate scheme is submitted to the highway authority for approval. The DfT standard includes principles of good practice and provides a national standard to which developers can work; although some elements included in the standard may not be applicable because of the nature of a particular scheme.

1.5 Motorway and Trunk Road projects are outside the responsibility of Kent County Council and are safety audited in accordance with procedures laid down by the Department of Transport and are subject to individual scheme contracts.

2. DEFINITION OF SAFETY AUDIT

2.1 Safety Audit is the continuous, systematic application of consistent safety checks throughout the preparation and construction of a highway scheme to ensure the minimum crash risk to all classes of highway user within economic and practical constraints. It is not a check on the construction of the structural elements of a major project, as these should be the subject of other independent checks, and neither is it an appraisal of the scheme itself or a check on correct design standards.

3. REASON FOR CARRYING OUT SAFETY AUDIT AND INDEPENDENCE FROM SCHEME DESIGN

3.1 Safety elements are incorporated in both the Department for Transport and the Kent County Council's design standards. In isolation these standards produce safe layouts; but there are many elements in the design and construction of a highway scheme and in combination there is the potential for undetected hazards. Evaluation of the various physical elements and their interaction (solely from a safety viewpoint) enables possible accident risks to be detected prior to the highway's use by any class of road user.

3.2 When designing a scheme the engineers responsible for the scheme should consider the safety aspects of the scheme as part of the overall design. Despite this,

they are not always in the best position to evaluate the scheme objectively and totally from the viewpoint of identifying potential safety hazards to the highway user. To do this the scheme needs to be examined by an experienced Safety Engineer unconnected with the original design.

3.3 It is not the role of the Safety Auditor to check that correct design standards have been applied, to re-design the scheme nor to question the professional capabilities of design engineers.

4. SAFETY AUDITORS' QUALIFICATION AND EXPERIENCE

4.1 To carry out a safety audit, the safety auditor must be accredited by Kent County Council. To be deemed accredited, the safety auditor must be able to demonstrate:

- a background in traffic and/or engineering, with experience in casualty reduction work and safety engineering. The minimum desirable experience for more complex schemes (as deemed so by the highway authority) is four years experience in casualty reduction work/safety engineering.
- has completed a formal safety audit course (PTRC/TMS Consultancy or similar approved course)
- that safety audit forms part of her/his regular work and has carried out at least six safety audits within the preceding 12 months.
- has received on going training within the past 4 years related to road safety work.

Note: Where a scheme is specifically requested to have a safety audit in accordance with HMRB Vol.5 Section 2 HD19/03 (November 2003) then the safety auditors must meet the desired requirements of this standard.

5. SAFETY AUDIT TEAM

5.1 At least one person involved in the safety audit must have recent knowledge of the site or have familiarised themselves with the location. This applies to all stages of the audit process. At outline design, where there are significant land-take issues and at the as-built stage, the site must be visited specifically for the purpose of the audit.

5.2 The size of the safety audit team is dependent upon the nature and scale of the scheme . The minimum is one accredited safety auditor, who can demonstrate that he/she has consulted with others involved in the scheme appraisal process to ensure that views are not formed in isolation. For schemes considered complex, additional safety auditors may be required as agreed with the Divisional Manager (or authorised representative).

5.3 As Built safety audit - The client for the scheme and others as deemed necessary by The Divisional Manager (or authorised representative) must be invited to attend the as built stage audit. These people would not be members or signatories of the Road Safety Audit Team formed for that particular scheme.

5.4 Interim safety audit - the safety auditor, where specifically instructed by the Divisional Manager (or authorised representative) should be accessible to comment on safety aspects of a scheme at any time during its planning, design and construction. Discussion and outcomes of such meetings must be recorded by the scheme promoter/design team and submitted with the documentation for the formal audit

6. SCHEMES WHICH NEED A SAFETY AUDIT

6.1 All schemes which will permanently alter the highway layout must go through the Safety Audit procedure. This includes all KCC funded highway improvement schemes, developer funded schemes, schemes designed by District or Borough Councils, and reconditioning schemes. Safety Audits do not need to be carried out on routine or minor maintenance works or some small footway schemes which do not materially affect the existing carriageway. On bridge reconstruction schemes which do affect the road layout an agreed simplified safety audit procedure applies. Temporary traffic management need not be formally safety audited as Chapter 8 of the "Traffic Signs Manual" and other guidance is fairly explicit. Also, the nature of the works enables situations to be rapidly changed.

6.2 **Self Safety Audit statement** - Where the Divisional Manager (or authorised representative) in consultation with the Scheme Project Manager does not consider that the scheme will have significant safety disbenefits she/he and the Project Manager may complete a self safety audit statement.

6.3 Before doing so they must review the proposal by checking it against safety audit process criteria (as detailed in section 9 of this guidance note). They will then sign a declaration as follows: *"I have checked the above scheme with regard to the road safety implications and with reference to the main factors considered during the safety audit process as noted in the "KCC Guidance Note for the provision of Safety Audit" which includes reference to HD19/03 check lists A B and C. Having done this, I do not consider the scheme proposals will have significant safety disbenefits. I therefore consider that an independent safety audit is not required"*.

6.4 The attached form may be used but it equally acceptable to provide this statement combined with a project check list. Advice can be sought from Road Safety (KCC or Jacobs) or from accredited safety auditors as appropriate.

7. RESPONSIBILITY TO ENSURE A SCHEME COMPLETES THE SAFETY AUDIT PROCESS AND THAT THE APPROPRIATE ACTION IS TAKEN

7.1 The Divisional Manager (or authorised representative) must ensure that a scheme goes through a safety audit process and that it is audited by accredited safety auditor(s).

7.2 The Divisional Manager (or authorised representative) must ensure that there is documented evidence that

- the feasibility of the scheme has been agreed in principle by the Division
- the scheme has been safety audited at the following stages - preliminary/outline design (stage1 audit); detail design (stage 2 audit) and as built (stage 3audit).
- the outcomes of the audit have been incorporated in the scheme.

7.3 The Safety Auditor will, if necessary, make various recommendations at each stage of the safety audit to ensure that the scheme will be as safe as possible upon completion. Where recommendations are made the Divisional Manager (or authorised representative) will make a written response confirming actions being taken because of the recommendations. Where the recommendations are not accepted, she/he will complete an Exception Report Form.

7.4 **Exception Report** -The Divisional Manager (or authorised representative) responsible for the scheme should make any decisions relating to the scheme and the Safety Auditor does not hold a power of veto over it. Equally, it is expected that the Safety Auditor's recommendations will generally be accepted. Where problems do occur it is hoped that they can be resolved following discussions between the

Project Manager/Engineer and the Safety Auditor. Should the Project Manager/Engineer ultimately decide (for whatever reason) that they are unable to adopt one or more of the recommendations they should clearly record this on the Exception Form, giving both the reasons for the decision and the likely outcome of it. The Divisional Manager (or authorised representative) must approve such an outcome

8. STAGES OF SAFETY AUDIT

8.1 A formal Safety Audit is carried out at three stages: Outline Design, Detail Design and prior to the opening (where practical) of the constructed scheme On very minor schemes the Engineer may choose to submit a stage 1 and stage 2 audit concurrently, but this must be made clear to the Safety Auditor who will carry out Stage 1 and Stage 2 checks on the scheme.

8.2 After dark audits are carried out when specifically instructed by the Divisional Manager (or authorised representative) and/or as advised by the Safety Auditor where he/she has identified specific concerns related to darkness issues.

8.3 For a scheme to be processed beyond the feasibility stage the Divisional Manager (or authorised representative) must have agreed that the scheme is feasible and provided a feasibility/ concept safety assessment (see attached form). At the feasibility stage the scheme is not formally safety audited, however safety comments and advice should be obtained. Such advice may be sought from KHS Road Safety (KCC or Jacobs) or accredited safety auditors as appropriate.

8.4 Interim safety Audit – After being instructed by a KCC Divisional Manager (or authorised representative) the Safety Auditor should be accessible to comment on safety aspects of a scheme at any time during its planning, design and construction. This form of continuous safety monitoring is intended to assist in lessening the Safety Auditor's workload at the formal intervention points by obtaining mutual agreement to acceptable layouts and designs. Discussion and outcomes of such meetings must be recorded by the scheme promoter/design team and submitted with the documentation for the formal audit.

8.5 A safety audit at outline design or detail design stage is only considered valid for a maximum of two years. If after this period the scheme is to be progressed beyond the outline stage or detail design stage, then it should be resubmitted for safety audit.

9. THE MAIN FACTORS CONSIDERED DURING THE SAFETY AUDIT PROCEDURE

9.1 The following lists should be read together with Annex A, B and C of HD 19/03 as aids to ensuring that all factors which could affect scheme safety are considered. They should not be seen as prescriptive check lists - All elements may not be applicable and individual schemes may have particular factors unique to the scheme. Individual elements also need to be considered in relation to the totality of the scheme.

9.2 STAGE 1 - Outline Design

- Appropriate Design Speed
- Stopping Sight Distances
- Visibility Splays
- Vehicle Swept Paths
- Junction Suitability
- Maintenance Safety
- Pedestrian Safety

Cyclist Safety
Safety of the visually impaired and mobility handicapped
Impact/effect of any displaced traffic in respect of all of the above,
Landscaping effects

And as detailed in DMRB. Vol 5 SEC. 2 -HD19/03 Annex A: Stage 1 Check List

9.3 STAGE 2 - Detail Design

Appropriate Design Speed
Misleading Environment
Three Dimensional
Stopping Sight Distance
Visibility Splays
Vehicle Swept Paths
Junction Suitability
Maintenance Safety
Pedestrian Safety
Cyclist Safety
Landscaping
Street Lighting Alignment
Siting of Street Furniture
Roundabout Safety
Changes of Camber
Safety of the visually impaired and mobility handicapped
Possible headlight glare
Proposed standard of road & other pavement surfaces

And as detailed in DMRB. Vol 5 SEC. 2 -HD19/03 Annex B: Stage 2 Check List

9.4 STAGE 3 - As Built

Provision of signs and road markings.
Ensure that street furniture, landscaping or safety barrier does not unduly impinge on driver/pedestrian visibility.
Assess whether impression on drivers is misleading or not.

And as detailed in DMRB. Vol 5 SEC. 2 -HD19/03 Annex C: Stage 3 Check List

10. SUGGESTED INFORMATION TO ENABLE A SAFETY AUDIT TO BE CARRIED OUT (AUDIT BRIEF).

10.1. For all stages of the safety audit procedure, a location plan and description of the scheme is required

10.2. State the audit stage required.

10.3. Scheme plans are required at an appropriate scale including areas beyond the site of works. Also a completed Background Information Form (HU-FM-BO) is to be supplied. With the detail design (stage 2) application the plans must show scheme and construction details, departures from standards, and the lighting and signs / road marking details.

10.4 A technical assessment of the scheme should also be provided where appropriate or where specifically requested

10.5. Any previous safety audit reports should be supplied. Also, previous responses to comments made within safety audits, exception reports, together with copies of notes of any previous interim audit discussions.

10.6 Supply A3/A4 size plans for the Safety auditors' use to mark up and annotate

10.7. Give details and reasons for any departures or relaxation from the standard or confirm that there are no relaxations or departures from the standard.

10.8. State any areas of concern which the Project Manager may have and wishes to bring to the attention of the Safety Auditor.

10.9. Provide details of any changes brought about since a previous stage in the safety audit process.

10.10 Supply contact details for appropriate bodies, such as the maintaining authority, and the police.

10.11. State the cost code for charging the work if applicable.

11. SAFETY AUDIT PROCESS AND REPORT

11.1. Based on the information supplied, the safety implications of the schemes are to be considered in relation to the principal safety issues referred to in section 9 of this guidance and HD19/03 (Annex A, B and Cs Checklists). These lists should be used as an aid to covering all aspects of safety and assessing risk to road users. They should not be used as a prescriptive check list. A Safety Auditor completes and signs the Safety Audit Report and states that:

"I/we certify that I/we have examined the relevant drawings and documents listed, in respect of road safety. The examination of the proposed works has been carried out with the sole purpose of identifying any features of the design that could be removed or modified in order to improve the safety of the scheme or any adjacent highway affected by it. The issues identified have been noted in this report together with associated safety improvement recommendations, where possible, which should be studied for implementation." The auditor confirms it complies with a specific standard or terms of reference - *"The audit has been done in accordance with the "KCC Guidance Note for the Provision of Safety Audit"*

11.2 Where the Safety Auditor considers there is insufficient information to carry out the Safety Audit procedure, the submitted documentation should be returned to the originator noting the reason for not carrying out the Safety Audit.

11.3 The Safety audit report should include:

- Location, District and brief description of the scheme
- Safety audit stage
- Referencing details (Job No., Client's reference, auditors, reference.)
- List of drawing numbers and documentation
- Names and details of safety auditor(s) and others in attendance/involved.
- Where applicable, details of site visit specifically for the audit (date, time, those present, weather, traffic conditions.)
- Where specific site visit for the audit not undertaken, this is to be stated with an appropriate clarifying statement.
- Reference to the terms/standard used for the audit and a statement confirming that the safety audit has been carried out in accordance with such standards by the named lead safety auditor, signed and dated.
- The report should normally be laid out in the problem/recommendation format for each issue raised. Where specific road safety problems are identified, the location and background reasoning must be stated together with a description of

the problem and the potential crash problem likely to occur. This must be followed by a recommendation to mitigate or resolve the problem.

- A summary report of the recommendations is to be provided in a format which provides space for the scheme design/promoter and Divisional Manager(or authorised representative) to respond with comments; and to state the resulting action for each recommendation (see attached response report format)
- An A3/A4 size location plan annotated to reference any problems, together with any other clarifying documentation (e.g photographs) as appropriate or specifically requested.

12. Monitoring

12.1. The Road Safety Team in liaison with the Divisional Offices review crash sites. This is done based on a three year crash record, where six or more reported injury crashes in a specific location. Kent's crash sites are reviewed annually and where a casualty reduction measure can be identified and a scheme produced, this is put forward within a programme of casualty reduction schemes. Consequently this search should identify safety audited schemes with a crash record of six or more injury crashes within three years.

12.2 It is expected that safety issues which may arise in the first 12 months after scheme implementation can be identified by the Divisional Offices (or their representatives) within routine highway inspections and from the normal working practices of Divisional offices. Once the scheme has one year of crash data available, where resources permit, the crash record should be examined and the safety of the scheme reviewed.

12.3 Information obtained from both safety audit work and crash reduction work should be fed back to the KCC Road Safety Team. Problem areas relating to local and national standards can then be identified to enable documentation to be amended and updated as appropriate.

12.4 A sample of schemes' road safety audits will be "called in" by the Road Safety Team periodically and reviewed to establish consistency of standard and process across the County.

12.5 It is desirable for a minimum of two members of the Road Safety Team to maintain their KCC accreditation as safety auditors.

13. Reference Documents:

HMRB: Vol 5 section 2 HD 19/03

IHT: Guidelines for the Safety Audit of Highways1996

Kent Design

14. Road Safety Audit Assessment Feasibility/Concept Report (attached)

15. Road Safety Audit Self Audit Report (attached)

16. Road Safety Audit Response Report (attached)

17. Road Safety Audit Exception Report (attached)

18. Examples safety audit report formats and supporting information documentation - These are forms which may be used for minor and simple schemes if considered appropriate (See separate document). These are not mandatory, and a safety audit report produced based on paragraph 11 and a safety audit brief based on paragraph 10 is equally acceptable.

J M Horton

August 2004

Revised Feb 2007 (Minor changes as a result of KHS alliance Sept 2005)



ROAD SAFETY ASSESSMENT FEASIBILITY/CONCEPT REPORT

At the feasibility/concept stage the scheme is not formally safety audited, however safety comments and advice are obtained from KHS Road Safety or accredited safety auditors as appropriate and documented in this report

PROJECT:	LOCATION:	
PROJECT MANAGER:	Project No:	DATE:
DESIGN ENGINEER:		FILE REFERENCE:
SCHEME DESCRIPTION:		
DRG NOS:	SITE VISIT: (YES/NO) DATE:	
WEATHER CONDITIONS:		
ASSESSMENT:		

Assessor(s) name:	As Design Engineer I acknowledge receipt of assessment.
Job Title:	
Signed: Date:	
Signed: Date:	Signed: Date: (return signed copy to assessor)

SA/CON/FEB07-For use in conjunction with the Guidance Note for the Provision of Safety Audit for KHS

ROAD SAFETY AUDIT SELF AUDIT REPORT



PROJECT:	SCHEME DESCRIPTION;	
PROJECT MANAGER:	Project No:	DATE:
SA STAGE: 1 OUTLINE or 2 DETAIL or 3 AS-BUILT		FILE REFERENCE:
COMMENT:		

SELF SAFETY AUDIT STATEMENT

I have checked the above scheme with regard to the road safety implications and with reference to the main factors considered during the safety audit process as noted in the "KCC Guidance Note for the provision of Safety Audit" which includes reference to HD19/03 check lists A B and C . Having done this, I do not consider the scheme proposals will have a significant safety disbenefit. I therefore consider that an independent safety audit is not required

Designer		Project Manager	
Name		Name	
Title		Title	
Date		Date	

ROAD SAFETY AUDIT RESPONSE REPORT



STAGE No

Location:	[Location]	Scheme:	[Full scheme name]
Drawing numbers:	[drawing numbers]	Project number:	[from project register]
Site visit:	[yes/no] Date:	Weather:	During Darkness/Light

All issues suffixed with '**recommendation**' are considered to be of sufficient importance to require action. Issues suffixed with '**comment**' are included for information and consideration only. Please use a separate sheet for detailed comments and responses.

Item number	Section 1 Comments and recommendations made by Safety Auditor	Section 2 Design Engineer's comments	Section 3 Scheme promoters decision and proposed action.
	Auditor:	Design Engineer:	Scheme Promoter:
	Date:	Date:	Date:
	Signed:	Signed:	Signed:

If the Safety Auditors recommendations are not accepted by the Scheme Promoter, an Exception Report must be created and approved by the Head of Operations at the relevant Divisional office.

The terms of reference of this audit are as described "KCC Guidance Note for the Provision of Safety Audit". The auditor(s) has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs, or justification of the works, to any other criteria.

The Safety Auditor(s) certify that I/we have examined the relevant drawings and documents listed, in respect of road safety. The examination of the proposed works has been carried out with the sole purpose of identifying any features of the design that could be removed or modified in order to improve the safety of the scheme or any adjacent highway affected by it. The issues identified have been noted in this report together with associated safety improvement recommendations, where possible, which should be studied for implementation.

SA/SEL/FEB07- For use in conjunction with the Guidance Note for the Provision of Safety Audit for KHS

ROAD SAFETY AUDIT (RSA) EXCEPTION REPORT:

STAGE No

Location:	[Location]	Scheme:	[Full scheme name]
Drawing numbers:	[drawing numbers]	Project number:	[from project register (e.g. EK0048)]



Item numbers should match those used in the Safety Audit Response Form

Item number	STEP 1	STEP 2	
	Reason for non acceptance (i.e. economic, physical, environmental)	Exception excepted / not accepted by Head of Operations and comments.	
		[accepted / not accepted]	
		[accepted / not accepted]	
		[accepted / not accepted]	
		[accepted / not accepted]	
		[accepted / not accepted]	
	Design Engineer:	Scheme Promoter:	Head of Operations:
	Date:	Date:	Date:
	Signed:	Signed:	Signed:

STEP 3 (approval to proceed with Scheme)

	Scheme approved	Signed by Head of Operations		
	Scheme not approved	Signed	Date	Print name

SAEXC/FEB 07 –for use in conjunction with the Guidance Note for the Provision of Safety Audit for KHS

Examples of Road Safety Audit Report Formats.

These are not mandatory and a safety audit report produced based on paragraph 11 of the Guidance Note for the Provision of Safety Audit for KHS is also acceptable



ROAD SAFETY AUDIT REPORT

The terms of reference of this audit are as described in the “KCC Guidance note on the Provision of Safety Audit.” The auditors have examined and reported only on the road safety implications of the scheme as presented and have not examined or verified the compliance of the designs, or justification for the works, to any other criteria. All issues identified with a “Recommendation” are considered to be of sufficient importance to require action. Other issues may be identified under “Comment” and are included for information or consideration.

PROJECT:	LOCATION:	
PROJECT MANAGER:	Project No:	DATE:
SA STAGE: 1 OUTLINE or 2 DETAIL or 3 AS-BUILT		FILE REFERENCE:
SCHEME DESCRIPTION:		
DRG NOS:	SITE VISIT DATE: DURING DARKNESS/LIGHT: WEATHER:	

<i>Problems/recommendations/comments</i>
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Safety Audit Statement: I/we certify that I/we have examined the relevant drawings and the above information documents in respect of road safety. The examination of the proposed works has been carried out with the sole purpose of identifying any features of the design that could be removed or modified in order to improve the safety of the scheme or any adjacent highway affected by it. The issues identified have been noted in this report together with associated safety improvement recommendations.”

The audit has been done in accordance with the “KCC Guidance Note for the Provision of Safety Audit”

Audit Team

Lead Safety Auditor

Full name
Full job title
Address.

Signed (*mandatory*):..... Date:

Safety Auditor(s)

Full name
Job title
Address

Signed (*optional*): Date:

Observer(s) Present:

Full name
Full job title
Address

Signed (*optional*) Date

Kent Highway Services Alliance



ROAD SAFETY AUDIT REPORT: STAGE () AUDIT

Location:

Scheme:

Project Ref:

(insert picture of location)

Report Date:

Author:
Contents

This report comprises

- 0. Terms of reference
- 0. Scheme context
- 1. Information documents
- 2. Comments
- 3. Audit statement
- 4. Auditor details
- 5. Client response

0. Terms of reference

The terms of reference of this audit are as described in the “KCC Guidance note on the Provision of Safety Audit.” The auditors have examined and reported only on the road safety implications of the scheme as presented and have not examined or verified the compliance of the designs, or justification for the works, to any other criteria. All issues identified with a “Recommendation” are considered to be of sufficient importance to require action. Other issues may be identified under “Comment” and are included for information or consideration

1. Scheme context

(Give outline of proposed scheme and a list of its main elements)

(give brief description of the highway)

(insert location map)



Information provided by the client is annexed to this report.

For Stage 1 Audit – appendix Stage 1 Audit : SA1 form
For Stage 2 Audit – appendix Stage 2 Audit : SA2 form
For Stage 3 Audit – appendix Stage 3 Audit : SA3 form

3. Comments

All written submissions have been examined as part of the audit and a site assessment has been carried out. My/our main findings are given in step 1 of the Road Safety Audit response form below.

(The auditor may include more detailed observation on each item numbered within the Road Safety Audit response form)

4. Audit statement

“I/we certify that I/we have examined the relevant drawings and the above information documents in respect of road safety. The examination of the proposed works has been carried out with the sole purpose of identifying any features of the design that could be removed or modified in order to improve the safety of the scheme or any adjacent highway affected by it. The issues identified have been noted in this report together with associated safety improvement recommendations.”

The audit has been done in accordance with the “KCC Guidance Note for the Provision of Safety Audit”.

5. Audit Team

Lead Safety Auditor

Full name
Full job title
Work Address

Signed..... Date

Safety Auditor(s)

Full name
Full job title
Work Address

Signed..... Date

6. Observer(s) Present

Full name
Full job title
Work Address

Signed..... Date

7. Client response

In accordance with the Kent Guidance Note for the Provision of Safety Audit section 7 the client, Kent Highway Services, is charged with making a written response to the recommendations I/we have made.

The client should note that all issues identified with a “**Recommendation**” are considered to be of sufficient importance to require action. Other issues may be identified under “**Comment**” and are included for information or consideration.

In accordance with the Kent Guidance Note clients should complete a safety audit exception report form in respect of any item where they do not accept the recommendation. An audit exception report template is attached to facilitate this.

Supporting Information Forms. for Road Safety Audit Reports

These forms (based on the Guidance Note for Scheme Promoters) assist with the requirements of paragraph 10 of the Guidance Note for the Provision of Safety Audit for use by KHS

STAGE 1 : ROAD SAFETY AUDIT - SUPPORTING INFORMATION



1.1: Designers Check list

Scheme Name	
Location/ Description	

File Ref No.		RSA Ref No.	
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List of Submitted Drawings

Drawing No. (and revision No)	Title	Scale

Checklist for documentation

Completed Forms/ Information	Included	Comment
Background Information (Form 1.2) - Required to be completed in all circumstances.		
Is there provision for Cyclists. (Cycle Appraisal & Design (Form 1.3) - completed where applicable)		
Street Lighting calculations		
Direction & Traffic signs/ Marking Schedule		
Is there provision for Emergency & Residential Access/ Parking		
Are TRO's required/ attached		
Is there a 278 connected with this scheme		

*delete as necessary

Please note any Departures from the Kent Design Guide & KCC Technical Information

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I confirm that the scheme has been designed to relevant DfT and KCC standards and the documentation as listed below* and I confirm the accuracy of the information.

Name: _____ Role: _____ Tel. No _____

Signed..... Date.....

Document List - tick to confirm use

- DfT/DMRB Standards
- Kent Design
- KCC Mobility Guidance Note
- KCC Code of Practice: Traffic Calming
- KCC Highway Design and Safety Advice – a guide to good practice
- KCC Guidance Note for Scheme Promoters
- KCC Cycle Scheme Audit Information

SA/SEL/FEB07- For use in conjunction with the Guidance Note for the Provision of Safety Audit for KHS

STAGE 1 : ROAD SAFETY AUDIT – SUPPORTING INFORMATION



1.2 Designers Assessment & background information

Scheme Name	
Location/ Description	

Background Information Report Attached	Yes
<i>Please tick appropriate box</i>	No (all information provided on this form)

Headings & Question No.	<i>Please state Not Required or tick the column for information heading covered in report (shaded rows) and for answers to questions state Yes/No.</i>
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Background Report Headings		Tick or say Not Required	Comments
2.1	Crash History		
2.2	Traffic Flows		
2.2.1	For roundabouts, signal controlled junctions and other major junctions, have capacity checks been included (including am/pm)peaks?		
2.3	Traffic Speed		
2.4	Pedestrian/Cyclists/Mobility Impaired/Vulnerable Users		
2.4.1	Are any pedestrian movements diverted more than 10 metres in urban areas or 20 metres in rural areas from their established desire line (including formal/informal crossing points)? <i>If yes detail where and reason for this.</i>		
2.4.2	Are flush kerbs and tactile paving provided at all crossing points? <i>If not please detail where and reason for this.</i>		
2.4.3	Where a signal controlled crossing separate from a junction is provided, will the crossing include tactile paving and appropriate audible signals for pedestrians? <i>If so please state which and if not please detail reason for this.</i>		
2.4.4	Where a signal control junction is provided, does it have signal-controlled pedestrian phases across all approaches? <i>If not please detail reason for this.</i>		
2.4.5	Where a signal-controlled crossing is provided at a junction, will the crossing include tactile paving, and audible or tactile indicators for pedestrians. <i>If so please state which and if not please detail reason for this.</i>		
2.4.6	Where a Toucan crossing is provided has a drawing showing the associated cycle network been included?		

Background Report Headings		Tick or say Not Required	Comments
2.5	Public transport Plan of local bus routes included?		
2.5.1	Are any bus stops relocated or affected by the scheme? <i>If so, please detail changes and discussions with KCC, including the contact.</i>		
2.6	Development Proposals		
2.7	Physical Constraints		
2.7.1	Does the Scheme Promoter have control or can obtain control over all the land required for visibility splays? <i>If not clarify.</i>		
2.8	Vertical Alignment		
2.9	Scheme Usage		
2.9.1	Can the swept paths for the maximum size of vehicle using the scheme be achieved? <i>If not detail where and reason for this.</i>		
2.10	Road Surface and Drainage		
2.11	Signing and Markings		
2.11.1	Is there sufficient space for signing to be installed including provision for visibility splays to signs? <i>If not detail where and reason for this?</i>		
2.12	Lighting		
2.12.1	Does the scheme have a system of existing street lights?		
2.12.2	Are the adjacent sections of road to the scheme lit?		
2.12.2	Are modifications to the existing lighting proposed or is a new lighting system to be provided? <i>If yes, please state which.</i>		
2.13	Landscaping & Environmental Enhancements		
2.14	Design Standards & Departures		
2.14.1	Design speed (kph)	Is the scheme designed to DfT/Kent Design standards for its design speed? <i>If not detail where and reason for this?</i>	
2.14.2	Speed limit (mph)		
2.14.3	What visibility splays are used (if applicable)		
2.15	General Comments		

STAGE 1 : ROAD SAFETY AUDIT



1.3 Designers submission for cycle scheme appraisal

Scheme Name	
Location/ Description	

If cycle facilities are being provided, please complete Section 1 only. If no cycle facilities are being provided, please complete Section 2 only.

In both cases, please ensure you enclose a plan of cycle routes.

SECTION 1

For schemes promoting cycling	Y	N	N/A	Comments
Does the scheme make up part of a comprehensive network of routes?				
Is the route direct?				
Does it link with existing facilities?				
Is there evidence of concern from cyclists using routes in the vicinity?				
Are there any trip generators in the vicinity?				
Is there direct and safe access for cyclists to all points?				
Is there any parking provision?				
Is the route to be lit?				

SECTION 2

Schemes where cycle facilities are not proposed.	Y	N	N/A	Comments
Is the route suitable for cyclists to use?				
Are there any existing cycle facilities in the vicinity?				
Are any cycle routes proposed?				
Is there evidence of concern from cyclists?				

STAGE 2 : ROAD SAFETY AUDIT –SUPPORTING INFORMATION



2.1: Designers Check list

Scheme Name	
Location/ Description	

File Ref No.		RSA Ref No.	
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List of Submitted Drawings (Three copies of plans required)

Drawing No. (and revision No)	Title	Scale

Design Standards

Design Speed		kph	Maximum size of vehicle needing to use scheme	
Speed Limit		mph	What visibility splays are used (If applicable)	

Checklist for documentation

<u>Completed Forms/ Information</u>	<u>Included</u>	<u>Comment</u>
KCC letter of confirmation of principle/outline design of scheme & requirements.	Yes/No	
Scheme Sponsor's confirmation letter that requirements have been addressed	Yes/No	
Geometric Design standards and note of departures from standard	Yes/No	
Traffic Signs/Marking Schedule	Yes/No	
Street Lighting calculations	Yes/No	
Cycle Design (Form 2.2) (where applicable)	Yes/No	
Completed safety audit report/exception reports and documentation	Yes/No	
Other documentation in accordance with "KCC Design Package" or additional information (please state)	Yes/No	

I confirm that the scheme has been designed to relevant DfT and KCC standards and the documentation as listed below* and I confirm the accuracy of the information.

Name: _____ Role: _____ Tel. No _____

Signed..... Date.....

Document List - tick to confirm use

- DfT/DMRB Standards
- Kent Design
- KCC Mobility Guidance Note
- KCC Code of Practice: Traffic Calming
- KCC Highway Design and Safety Advice – a guide to good practice
- KCC Guidance Note for Scheme Promoters
- KCC Cycle Scheme Audit Information

STAGE 2 : ROAD SAFETY AUDIT-SUPPORTING INFORMATION



2.2 Designers submission for cycle scheme appraisal

Location	
Scheme Description & Scheme Ref	
Submitted by	

SECTION 1	Comments
1. What volumes of traffic use the roads affected by the scheme?	Peak hour _____ 12 hour _____ HGV/Bus % _____
2. What volumes of cyclists use the roads affected by the scheme?	Peak hour _____ 12 hour _____
3. How many personal injury crashes involving cyclists have occurred in the vicinity of the route in the last 3 years?	
4. What is the 85 th percentile vehicle speed along the route?	

SECTION 2	Y	N	N/A	Comments
General				
1. Are there any trip generators in the vicinity? (please identify)				
2. Is there scope for a convenient cycle route away from the road?				
3. Are cyclists exempt from any TRO's or road closures?				
4. Are flush dropped kerbs provided?				
5. Is there clearance of at least 4m (7m for two lanes) between refuge and kerb?				
6. Does the width of the cycle lane accord with guidelines?				
7. Is there sufficient space alongside parking/loading areas?				
8. Does any point along the route have a gradient greater than 3%. If so, where?				
9. Do drainage conditions eliminate puddling?				
Traffic Signals and Signalled Crossings				
1. Are toucan crossings required at any crossing point along the route?				
2. Are advanced stop lines required at any point along the route?				
3. Are phasing and timings at signals sufficient to permit cyclists to clear junctions safely?				
4. Are all existing and potential cycle movements catered for?				
SECTION 2 (cont.)	Y	N	N/A	Comments

Roundabouts				
1. Are there any alternative routes which would avoid roundabouts?				
2. Could alternative junctions be used to avoid using roundabouts?				
3. If not, can the design be modified to improve safety for cyclists:				
Traffic Calming				
1. Will cyclists be able to avoid horizontal calming features?				
2. Will cyclists be "squeezed" at any pinch points?				
3. Will cyclists be able to avoid vertical calming features?				
Cycle Lanes				
1. Does the lane continue as advisory across side road junctions?				
2. Are cycle lanes free from obstructions?				
3. Is the treatment of any segregated facilities satisfactory?				
4. Are carriageway entry/exit lanes satisfactory?				
Overall				
1. Is the scheme set properly in order to provide a coherent cycling infrastructure?				
2. Is the route for cyclists reasonably direct?				
3. Is the scheme attractive enough to encourage cyclists to use it?				
4. Is amount and location of cycle parking adequate for its intended use?				

STAGE 3 : ROAD SAFETY AUDIT-SUPPORTING INFORMATION



3.1: As built

Scheme Name			
Location/ Description			
File Ref No.		RSA Ref No.	

Checklist for documentation

<u>Completed Forms/ Information</u>	Included	Comment
Stage 2 RSA attached?	Yes/No	
Client response/exception report attached?	Yes/No	
Details of on site changes subsequent to stage 2 audit.	Yes/No	
Particular concerns or comments the Engineer's representative has regarding the scheme	Yes/No	
As Built Drawings completed	Yes/No	Drawing No's (<i>where applicable</i>)

Remarks:

Name:	Role:	Tel No:
Signed:.....		Date: