

**DIRECTORATE OF DEVELOPMENT, ENVIRONMENT &
LEISURE**

STREET FORCE AND DEVELOPMENT SERVICES

ROAD SAFETY AUDIT STANDARD 2005

Approved by:-

Overall Project Lead – John Charlton

Project Sponsor – David Curtis.....

Project Lead – Kevin Platt.....

Version No.....

Date.....

SHEFFIELD CITY COUNCIL
DIRECTORATE OF DEVELOPMENT, ENVIRONMENT
& LEISURE

DEVELOPMENT SERVICES

SHEFFIELD CITY COUNCIL
ROAD SAFETY AUDIT STANDARD 2005

Prepared by:

TRANSPORT & HIGHWAYS - ROAD SAFETY

DATE: 3 AUGUST 2005

SHEFFIELD CITY COUNCIL ROAD SAFETY AUDIT STANDARD 2005

1.0 INTRODUCTION

- 1.1 This Standard has been prepared and formally approved by Sheffield City Council, and supersedes the previous Sheffield City Council Road Safety Audit Standard dated January 1998.
- 1.2 Following the publication of the Highways Agency Road Safety Audit Standard HD 19/03, which came into effect in November 2003, it was decided to update the Council's Standard. This new Sheffield Standard is based on HD19/03 but adapted to suit the structure and resources of a Local Authority [see section 6 of the Sheffield Standard for departures from the Highways Agency document in terms of staff resources]. Sections 4 and 5 of the Standard outline the roles of the various parties and the various stages of the Audit, including requesting the Audit, the Audit itself, Reports and Arbitration. Section 6 outlines the Departures from the Standard HD 19/03.

2.0 OBJECTIVE OF ROAD SAFETY AUDIT

- 2.1 The purpose of Road Safety Audit is to identify any road safety concerns in a highway improvement scheme and where possible to recommend modifications that would reduce the risk of accidents occurring in the resultant scheme.

3.0 SCOPE

- 3.1 This Sheffield Standard applies to:
- All Highway Improvement and Highway Maintenance schemes on Sheffield's roads where the estimated cost, including fees, is above £20,000.
 - Highway Improvement and Highway Maintenance schemes of a lesser value where the Design Team requests, at their discretion, a Road Safety Audit [for example where the project will result in substantial changes for road users]. Most schemes of a lesser value are likely to be small and uncomplicated and possibly unlikely to give rise to concerns. However, it is the responsibility of the designer to ensure that schemes are designed to the latest Safety Standards, and to check with the Road Safety Team if there are any doubts over the solution being proposed.
- 3.2 Road Safety Audit should not be regarded as a technical check of the project design [that is checking of the design for compliance with Design Standards]. If there are any departures from Design Standards, then the Audit Team will need to be informed of them, so that the road safety implications can be checked.

4.0 DEFINITIONS

- 4.1 **Highway Improvement and Highway Maintenance Schemes**

All works that involve construction of new highway or permanent change to the existing highway layout or features, Section 278 works arising out of development proposals, and Highway Maintenance schemes.

4.2 **Audit Stages**

Audits are to be carried out at four stages:

- Stage 1: on completion of feasibility checks [before detailed design] and prior to planning approval for Section 278 works.
- Stage 2: on completion of detailed design and before construction.
- Stage 3: on substantial completion, prior to opening to traffic if practicable.
- Stage 4: 12 and 36 months after opening to traffic - accident monitoring.

Highway Maintenance schemes are to be Audited at Stages 2 and 3 only.

On projects that are particularly straightforward, and are unlikely to give rise to major concerns at Stage 1, Stages 1 and 2 of the Audit can be combined. The Design Team can also request an Interim Audit at any stage of the project, whereby part or all of the design or works is Audited. This does not remove the need to carry out the Audit at the Stages described above.

4.3 **Audit Team**

The persons carrying out Road Safety Audits shall be members of the Sheffield City Council's Road Safety Team or be Specialist Consultants, appointed by the Road Safety Team. For highway improvement schemes over £20,000, no member of the Audit Team should have been involved in the original design of that scheme.

- **Audit Team Leader:** A person with training, skills and experience necessary for the Audit procedure, proficient and conversant in Road Safety Audits and Accident Investigation / Prevention techniques on a current and frequent basis. This person should be capable of leading on the Audit, managing the Audit Team and certifying the report for any particular Audit.
- **Audit Team Member:** As above, but not taking the lead role in the Audit process.
- **Audit Team Observer:** A person who may have some input into the Audit but does not necessarily meet the level of experience and competence as outlined above, but who is nevertheless working towards that standard of competence.
- **Specialist Advisors** may be appointed by the Audit Team Leader to advise on specific aspects of a particular project at any Audit Stage, for example to advise on traffic signals or street lighting, but are not members of the Audit Team.

Specialist Advisors may be external to the Council and may include the Police [who should normally be involved at Stage 3 of the Audit]. Persons who carry out the accident monitoring [for Stage 4 Audit purposes] are also designated as Specialist Advisors.

5.0 ACTIONS

5.1 Requesting an Audit

- Audits shall be requested at each of the four stages as previously outlined.
- A Stage 1 Audit is required early in the design process, and therefore may also be requested by the Client or Case Officer prior to any feasibility checks being carried out by the Design Team. In the case of development-led Section 278 schemes, the Stage 1 Audit must be completed prior to planning approval; Highways Development Control and the Audit Team may need early discussions in an attempt to tie in Section 278 works with the development's programme.
- At Stages 2 and 3 of the Audit, the Design Team must request an Audit. Any subsequent proposed alterations to the project must also be subject to Audit.
- At Stage 4 of the Audit, the Road Safety Team must be informed of the dates for the start and completion of construction work. This information is to be provided by the Design Team or electronically as part of the ECLS system . Ideally, both methods should be used to confirm the information.
- For Stage 4 Audits, the Road Safety Team is to investigate the injury-accident records to ascertain whether or not the highway improvement scheme has significantly increased the accident rate over and above the normal. Any alterations or modifications must then be submitted to the Client for assessment and possible inclusion in a future programme of work.

5.2 Information to be supplied

The following information should be supplied to the Audit Team:

Audit Stage	Drawings	Other information
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1	Outline proposals. These may include freehand sketches to illustrate the principles of the scheme, e.g. narrowing or widening the road and any changes to the type of junction.	Audit Brief [description of project, any design constraints, departures from Standards at this stage if applicable, significant anticipated changes to vehicular or pedestrian flows, and the speed limit], a programme date and possible future developments adjacent or near the proposed scheme to be Audited.
1/2 and 2	As appropriate, depending on scheme: General layout, street lighting, road signs, road markings, traffic signals, signals staging, guard rail, footway crossings, surface finishes, landscaping, street furniture, cross sections and longitudinal sections relating to the highway improvement scheme to be supplied (if requested by the Auditor) and tie-in details.	Audit Brief if not already supplied, Signs Schedule, departures from Standards if applicable and a programme date.
3	None, except 'as-built' drawings if the design has changed substantially.	Any changes since Stage 2, and information on commissioning date.
4	None	The Road Safety Team should be informed of the start and completion dates for construction work, so that accident monitoring can take place.

5.3 The Road Safety Audit

The Audit is to be carried out by a person who satisfies the requirements of an Audit Team Leader [as outlined in item 4.3] but the Audit Team may comprise more than one person. Specialist Advisors, appointed by the Audit Team Leader, may be consulted for advice on specific aspects of a particular project at any Stage of the Audit. The Audit Team should:

- Undertake an Audit appropriate to the Audit Stage, taking into account that the ideal minimum Design Standards may not necessarily always be attainable considering given constraints with site limits and existing site conditions.
- Consider the road safety implications of not meeting such Standards.
- Consider and recommend alternative solutions to address any road safety concerns if possible and where appropriate to reduce the risk of any accidents occurring.
- Be prepared to meet the Design Team, Client or Case Officer at any time during the Audit process, to discuss issues relating to the Audit. Such informal discussions can help to resolve any problems and differences of opinion before the Audit report is finalised. The Stage 1 Audit procedure should also have mitigated the need for major actions to be taken by the Design Team.

5.4 **Site visits**

The need for site visits by the Audit Team at Stage 1 of the Audit is at the discretion of the Audit Team; a minor project may not justify the time and Client's expense involved in attending site, especially if the Audit Team is familiar with the location. The Audit Team should always visit sites at Stages 2 and 3 of the Audit. A site visit at Stage 4 of the Audit is at the discretion of the Audit Team; if there are concerns about the accident rate, a site visit may well be required. It is at the discretion of the Audit Team whether to visit sites in daylight and/or darkness, and this decision may be affected by, for example, the nature of the measures or any known accidents.

5.5 **The Report Stage**

The Audit Team is to acknowledge receipt of the Audit request and submit a written report to the Design Team within a timescale of approximately 4 weeks, summarising any concerns identified together with recommendations where possible to address those concerns. A standard format for a road safety audit report is shown at Appendix B. If there are no concerns, the Audit Team shall inform the Design Team and state that the Audit can be closed.

The Design Team is to consider the Audit report, in liaison with the Client or Case Officer if considered necessary [for example, if there are significant financial implications arising from the recommendations].

The Design Team should also reply to the Audit Team within a timescale of approximately 4 weeks, in writing, stating their acceptance or disagreement with the items in the report.

The Audit Team is to consider the Design Team's response. To help resolve any issues, a discussion process is recommended between the Audit Team and Design Team.

If and when all concerns have been addressed, either by the Audit Team accepting the Design Team's position, or by the Design Team addressing the concerns in an agreed manner, then the Audit Team should write to the Design Team stating that the particular Stage of the Audit is 'closed'.

Each Stage of the Audit is to be closed by the Audit Team before the next Stage can be commenced.

5.6 **Arbitration**

Any issues not resolved at each Stage of the Audit shall be referred to Arbitration, with the outstanding issues outlined by means of an Exception Report. It is the responsibility of the Design Team to invoke Arbitration by writing to the Arbiter. The Design Team is to provide the Arbiter with copies of all documentation associated with the disputed matters, including the Exception Report with copies to the Auditor.

The Arbiter is to be the Head of Transport and Highways or his nominees. In reaching his decision he may consult the appropriate Highway Authority Officers and the Street Force Head of Design and Build or his nominee. In exceptional circumstances, the Arbiter may wish to consult the Director of Development Services and / or the Executive Director of Development, Environment and Leisure.

The Arbiter will consider all the facts, including a detailed risk assessment, and may convene meetings with the parties involved. The Arbiter will confirm the outcome, including the reasons behind any decision, in writing to the Design Team and the Audit Team. The Design Team is to implement the decision and record it in the Health and Safety File.

5.7 **Definitions in respect of Arbitration**

- Exception Report: This is a summary of any items contained in the Audit report that remain unresolved after discussion between the Audit Team and the Design Team. It is prepared by the Design Team on behalf of the Client or Project Sponsor and sent to the Arbiter, with a copy to the Audit Team. The Exception Report is to include the comments of the Design Team and also the reasons for the Design Team's non-acceptance of the Audit concerns, e.g. a particular concern raised may be insignificant, not economically viable or be outside the terms of reference for the project.
- Arbiter: The person or persons called upon to make authoritative decisions in the event of any unresolved issues, or disputes between the Design Team and the Road Safety Audit Team.

5.8 **Retention of documents**

The Design Team is to keep on file all copies of the documents connected with the Audit, including the Audit request, Audit reports, Exception Reports, covering memoranda/letters, notes of meetings, drawings, and any other relevant documents.

6.0 **DEPARTURES FROM THE STANDARD HD 19/03**

- 6.1 The Highways Agency's Design Manual for Roads and Bridges includes publication HD 19/03. This HA Standard makes it a mandatory requirement for

the road safety auditing of all trunk road schemes [including motorways]. It therefore only applies to highway projects carried out on the roads for which Sheffield is not responsible. It does, however, contain some relevant information that can be regarded as good practice, elements of which have been incorporated into this Sheffield Standard. The requirements in HD 19/03 have not been incorporated in their entirety, as their extent is unnecessarily complex and excessively consuming of staff resources for dealing with the types of schemes in Sheffield. For information, the Sheffield Standard main departures from HD 19/03 are as follows:

Departure	Comments
The requirement for the Client to seek approval of the suitability of the Audit Team members.	It can be accepted by the Client that those people carrying out the Audits are suitable for that task, and are experienced in accident investigation and prevention techniques.
The requirement for at least two team members to work on every Audit.	In some cases, one member may be adequate and acceptable, depending upon the complexity of the project and the Audit Stage. Employing two or more members for every Audit may better ensure that all potential dangers are identified, but is often not practicable, considering the level of workload and staff resources within the Council. A Police representative may assist at any Stage of the Audit as a Specialist Advisor.
The requirement to visit sites at all Audit Stages.	At Stage 1, when the proposals are only in outline form, it is not always essential to visit the site, especially when the project is minor or if the auditor is familiar with the location. At Stage 2, when the design detail is known, sites are to be visited. At Stage 3, a visit is essential. At Stage 4, it is optional.
The requirement to include a visit to the site during the hours of darkness at Stage 3 of the Audit.	This is left to the discretion of the Audit Team, and will depend upon the nature of the project. For example, a simple footway project may not necessitate a night visit.
The requirement to send the Audit report direct to the Client, who will	A more direct route is to be employed, whereby the report is sent direct to

Departure	Comments
then consult the Design Team as necessary.	the Design Team [or whoever the requester is], as they will often be in a better position than the Client to comment on technical matters. The Design Team will liase with the Client if this is considered necessary and send the Client or Case Officer a copy of the Audit report for information.
The requirement for the Client to report on issues direct to the Arbiter without prior discussion with the Audit Team.	A discussion process between the Audit Team and the Design Team is to be adopted, when necessary, which may lead to issues being resolved without the need for Arbitration.
All highway improvement schemes to be audited.	Only schemes over £20,000 in value to be Audited. Most schemes of a lesser value are uncomplicated and not likely to give rise to concerns. Also, such schemes are not likely to result in substantial changes for road users.

7.0 STANDARD FORMS

7.1 In order to achieve consistency, specific formats for the memoranda and reports are recommended for use. These are appended to this Standard as follows:

- Appendix A - Request for Audit
- Appendix B - Acknowledgement of Audit Request
- Appendix C - Road Safety Audit Report
- Appendix D - Reply to Audit Report
- Appendix E - Exception Report
- Appendix F - Request for Arbitration

Appendix A
Request for Audit

CITY OF SHEFFIELD - MEMORANDUM

From: [Insert appropriate heading,
Design Team, Highways
Development Control, or Client

Date:

Ref:

Tel. Ext:

Name

To: Transport and Highways
Road Safety

F.A.O Road Safety Manager

Ref:

TITLE OF PROJECT AND CHARGE CODE
STAGE 1, 2, 1/2, 3, ROAD SAFETY AUDIT [FEASIBILITY, DETAILED DESIGN,
FEASIBILITY/DETAILED DESIGN, PRE-OPENING]

Would you please carry out a Road Safety Audit for the scheme and Stage as described above.

[State programme date]

Drawings supplied:

[List]

Audit Brief:

Please provide following information [A separate document may be required for larger schemes].

Description of Project:

Design Constraints:

Departures from Standards:

Changes to vehicular / pedestrian flows:

The speed limit:

Appendix B Acknowledgement of Audit Request

CITY OF SHEFFIELD - MEMORANDUM

From: Development Services
Transport and Highways
Road Safety

To: [Insert appropriate heading, Design Team, Highways Development Control, or Client]

Date:

Ref:

Tel. Ext: Name [Auditor]

Ref:

F.A.O.

**TITLE OF PROJECT AND CHARGE CODE
STAGE 1, 2, 1/2, 3, ROAD SAFETY AUDIT [FEASIBILITY, DETAILED DESIGN,
FEASIBILITY/DETAILED DESIGN, PRE-OPENING]**

Thank you for your memorandum dated [date of Audit request], in respect of the above.

[As appropriate:]

I acknowledge receipt of your Audit request and expect to have a report with you in [number] weeks

Appendix C

Reply to Audit Request – Road Safety Audit Report

CITY OF SHEFFIELD - MEMORANDUM

From: Development Services
Transport and Highways
Road Safety

To: [Insert appropriate heading, Design Team, Highways Development Control, or Client]

Date:

Ref:

Tel. Ext: Name [Auditor]

Ref:

F.A.O.

**TITLE OF PROJECT AND CHARGE CODE
STAGE 1, 2, 1/2, 3, ROAD SAFETY AUDIT [FEASIBILITY, DETAILED DESIGN,
FEASIBILITY/DETAILED DESIGN, PRE-OPENING]**

Thank you for your memorandum dated [date of Audit request], in respect of the above.

[As appropriate:]

No concerns have been identified, and therefore this Audit Stage is now closed.

Please find attached my Road Safety Audit report. Please contact me if you need any clarification of the issues raised.

In accordance with the current Audit procedure, please send me your written response in due course.

ROAD SAFETY AUDIT REPORT

TITLE OF PROJECT AND CHARGE CODE

STAGE 1, 2, 1/2, 3, ROAD SAFETY AUDIT [FEASIBILITY, DETAILED DESIGN, FEASIBILITY/DETAILED DESIGN, PRE-OPENING]

1.0 Introduction

- 1.1 This report results from a Road Safety Audit for the scheme and Stage as given above, as requested by [name/title] on [date].

The Audit Team comprised:

Name Sheffield City Council, Development Services
Transport and Highways - Road Safety,
[Audit Team Leader for this Audit]

[Audit Team Member for this Audit]

[Audit Team Observer for this Audit]

Specialist Advisors, appointed by the Audit Team for advice on matters relating to their particular areas of expertise were:

PC Name South Yorkshire Police, Traffic Management

Name Sheffield City Council, Development Services, Transport Planning, [cycling issues]
Name Sheffield City Council, Development Services, Traffic Management, [traffic signal issues]
Name Sheffield City Council, Road Safety Team [accident monitoring work]

- 1.2 The Audit was undertaken in accordance with the current Sheffield City Council Road Safety Audit Standard and comprised an examination of the documents provided with the Audit Brief. Details of these documents are included at Appendix A.
- 1.3 The Audit Team has examined and reported on the road safety implications for the scheme as presented and has not examined or verified the compliance of the designs to any other criteria.
- 1.4 All comments and recommendations are referenced to the detailed design drawings and the problem locations plans included at Appendix B.
- 1.5 Site visits were made by the Audit Team on: [dates]
- 1.6 The Stage 2 Audit was completed on: [date]

2.0 Scheme Description

2.1 [Description if not already in Audit Brief.]

3.0 Items Raised at the Previous Audit Stage

3.1 [Refer to any previous Audit Stage, and state date it was closed.]

4.0 Unresolved Issues at Current Stage

4.1 Any unresolved issues shall be dealt with in accordance with the Sheffield City Council Road Safety Audit Standard 2005.

5.0 ITEMS IDENTIFIED IN THIS AUDIT

GENERAL PROBLEMS RELEVANT TO ALL SECTIONS: [Optional - may be more relevant to large schemes]

5.1 PROBLEM

Location: [State exact location and refer to drawings if necessary].

Summary: [Brief description of risks]

[Description of problem that may arise from those risks]

RECOMMENDATION

[Description of recommendation]

SPECIFIC PROBLEMS:

[Repeat as necessary]

6.0 Audit Team Statement

I certify that this Audit has been carried out in accordance with the current Sheffield City Council Road Safety Audit Standard 2005.

AUDIT TEAM LEADER FOR THIS AUDIT:

[Name]

Signed.....

Dated.....

Appendix A to Audit Report

Audit Brief, drawings and documents:

Document Reference: Highways/Audit Brief

List of Drawings supplied:

[Reference numbers]

[Following as appropriate:]

Other Information Provided:

- *Five Year Historical Accident Data*
Provided by Road Safety Team
- *Existing and Predicted 18-Hour AAWT Traffic Flows [plans and charts]*
Provided by Transport Planning [on larger schemes only].

Appendix B to Audit Report

Problem Location Plans:

List of Problem Location Plans

[Reference numbers]

Appendix C to Audit Report

Previous Audit Report:

Document Reference:

[Please note that this is for larger schemes only]

Appendix D to Audit Report

Comments from South Yorkshire Police:

Document Reference: [Police reference]

Appendix D

Reply to Audit Report

CITY OF SHEFFIELD - MEMORANDUM

From: [Insert appropriate heading,
Design Team, Highways
Development Control, or Client]

Date:

Ref:

Tel. Ext:

Name

To: Transport and Highways
Road Safety

F.A.O Road Safety Manager

Ref:

TITLE OF PROJECT AND CHARGE CODE

**STAGE 1, 2, 1/2, 3, ROAD SAFETY AUDIT [FEASIBILITY, DETAILED DESIGN,
FEASIBILITY/DETAILED DESIGN, PRE-OPENING]**

With regard to the above, thank you for your Audit Report and covering memorandum dated [date].

[Use as appropriate:]

I agree with your report in its entirety, and all the recommendations will be implemented. Would you please confirm that this stage of the Audit can now be closed.

I agree with your recommendations, except for the following: [or:]
I do not accept your recommendations, as follows:

[Reproduce appropriate parts of the report, and add reasons for not accepting].

Would you please contact me with a view to discussing this matter.

Appendix E Exception Report

EXCEPTION REPORT

PROJECT TITLE:

AUDIT STAGE: 1, 2, 1/2, 3

Road Safety Audit Reference:

ITEMS IDENTIFIED IN THE AUDIT REPORT

[EXTRACTS FROM ITEMS OF THE REPORT TO BE INCLUDED - I.E. FROM THE GENERAL SECTION AND THE MAIN SECTION OF THE REPORT]

PROBLEM

Location:

Summary:

RECOMMENDATION:

DESIGN TEAM'S COMMENTS:

[The Design Team to give reasons for non-acceptance together with any alternative solution, i.e. either because they feel that the problem identified is insignificant or outside the terms of reference of the project, or that the solutions recommended are not suitable given the economic and environmental constraints].

[Repeat above as necessary]

Appendix F
Request for Arbitration

CITY OF SHEFFIELD - MEMORANDUM

From: Street Force
Design and Build Division
Highway Design
Carbrook

To: Development Services

Head of Transport and Highways

Date:

Ref:

Tel. Ext:

Name [Project Manager or
Design Team Member]

Ref:

TITLE OF PROJECT AND CHARGE CODE

STAGE 1, 2, 1/2, 3, ROAD SAFETY AUDIT [FEASIBILITY, DETAILED DESIGN, FEASIBILITY/DETAILED DESIGN, PRE-OPENING]

REQUEST FOR ARBITRATION

Further to agreement not being reached as part of the Road Safety Audit process, in accordance with the Sheffield City Council Road Safety Audit Standard 2005, I would request that the Arbitration Process should now proceed.

I attach for your information a copy of the Exception Report in respect of the items that have not been resolved. A copy of the Road Safety Audit report is also available upon request.

The Audit Team Leader for this particular Audit is: *[name]*

Please could you make the necessary arrangements for the Arbitration Process. Should you require any additional information, please do not hesitate to contact me.