



Transport & Works Act Order (TWAO) Anglia Route GRIP 2 Review

Suffolk Stage1 Road Safety Audit

Report Number 367516/RPT015

Revision A

August 2016



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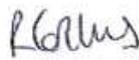
Suffolk Stage1 Road Safety Audit

August 2016

Network Rail

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A	08/08/2016	R J Collins / T J Blaney	A J Coleman	J A Castle	First Draft



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1 Introduction

Network Rail is carrying out feasibility studies to explore options for the closure of level crossings throughout Suffolk, as part of their on-going commitment to deliver a safer, more efficient and reliable railway. Mott MacDonald is considering Network Rail's GRIP 0 Solution to enable the closure of level crossings.

This report describes a series of Stage 1 Road Safety Audits carried out on highway works associated with proposed level crossing closures throughout Suffolk. The scheme proposals currently consist of indicative (high level) diversion routes as the result of closures and no formal highway works have been designed at this stage. Therefore this report considers potential road safety problems as a result of the proposed routes and their interaction with the highway. A detailed description of the proposed diversion routes at each location can be read in the respective individual level crossing review reports.

The audits took place at the Birmingham office of Mott MacDonald and consisted of a detailed examination of the submitted documentation and drawings listed in **Appendix A**.

A visit to each site was completed on either Wednesday 20th July 2016 between 14:00 and 18:30, during which the weather was sunny and the road surface was dry or on Tuesday 26th July between 14:00 and 17:30 during which the weather conditions were sunny and the road surface was dry.

It is confirmed that this is a Stage 1 Road Safety Audit and that the audit was undertaken upon completion of the feasibility design. It is also confirmed that the audit was carried out in accordance with the Highways England Departmental Standard HD19/15.

The Audit Team consisted of:

Andrew Coleman BA (Hons), MCHIT, MSoRSA (Team Leader)

Mott MacDonald

T Blaney BSc (Hons), CMILT, MCIHT, MSoRSA (Team Member)

Mott MacDonald

Rachael Collins BA (Hons), MSc (Team Member)

Mott MacDonald

No attempt has been made to comment on the justification of the scheme or the appropriateness of the diversion routes. Consequently the auditors accept no responsibility for the design or construction of the scheme. All of the issues raised in this report are considered to be required for action. The comments contained in the report are based on safety related concerns and as such the design engineer will need to consider carefully how to respond to each of the issues. The Audit Report Response should be completed by the Design Team and kept on file for future reference.

An Audit Brief was submitted to the Audit Team, however, no Personal Injury Collision data was included and has therefore not been reviewed as part of this audit. Traffic flows and speed data were also not available to the Audit Team.

A previous Stage 1 Road Safety Audit (Document Ref: 354763/RPT219B) was undertaken in December 2015 on level crossing closure proposals within Suffolk. This included some sites that have been audited on this occasion and sites that have been re-audited due to the development of alternative route options or amendments to the previously audited route. The table below lists the level crossing proposals that have been subject to a stage 1 road safety audit and when the audits were undertaken.

Site	December 2015	August 2016
S01 – Sea Wall (Green Route)		✓
S02 – Brantham High Bridge	✓	
S02 – Brantham High Bridge (Blue Route)		✓
S03 – Buxton Wood	✓	
S04 – Island	✓	✓
S05 – Pannington		✓
S06 – Daines Mayhew	✓	
S07 – Broomfield	✓	
S08 – Stacpool	✓	
S14 – Steggalls		✓
S19 – Rectory Road		✓
S20 – Beecroft		✓
S21 – Abbotts		✓
S23 – Higham	✓	
S24 – Higham Ground Frame	✓	
S24 – Higham Ground Frame (Blue route)		✓
S27 – Barrels	✓	✓
S28 – Grove Farm	✓	✓
S31 – Mutton Hall	✓	
S32 – Haughley Green	✓	
S36 – Stennetts 2	✓	
S38 – Lox Farm Fps	✓	
S44 – Orchard	✓	
S45 – Wickham Market	✓	

Site	December 2015	July16
S46 – Blaxhall	✓	
S48 – Saxmundham	✓	
S51 – Fordly Hall	✓	
S53 – Mells	✓	
S62 – Shepherd & Dog	✓	
S64 – Thorpe Grove	✓	
S69 – Bacton (Blue route)		✓
S69 – Bacton (Green route)		✓

A Key Plan indicating the location of any identified safety related issues is provided in **Appendix B**.

2 Items Raised at this Stage 1 Audit

This section describes road safety related issues identified by the Audit Team that are associated with the scheme as presented in **Appendix A**.

2.1 S01 – Sea Wall (Green Route)

The Audit Team did not identify any road safety related issues associated with the scheme.

2.2 S02 – Brantham High Bridge (Blue Route)

2.2.1 Problem

Location: A137.

Summary: Narrow road width may lead to conflict between pedestrians and vehicles.

It is proposed that pedestrians will walk along a section of the A137 where no footway or notable verge is present; pedestrians walking in the verge for extended periods of time may be vulnerable to trips and falls or choose to walk in the carriageway. A high volume of traffic was observed travelling at high speeds and visibility is restricted by the highway geometry and vegetation. These factors may result in collisions between pedestrians and vehicles.

Figure 2.1: Lack of verge or footway on A317.



Source: Mott MacDonald

Recommendation

It is recommended that a suitable footway is provided.

2.3 S04 – Island

The Audit Team did not identify any road safety related issues associated with the scheme.

2.4 S05 – Pannington

The Audit Team did not identify any road safety related issues associated with the scheme.

2.5 S14 – Steggalls

The Audit Team did not identify any road safety related issues associated with the scheme.

2.6 S19 – Rectory Road

The Audit Team did not identify any road safety related issues associated with the scheme.

2.7 S20 – Beecroft

The Audit Team did not identify any road safety related issues associated with the scheme.

2.8 S21 – Abbots

The Audit Team did not identify any road safety related issues associated with the scheme.

2.9 S24 – Higham Ground Frame (Blue route)

2.9.1 Problem

Location: Coalpit Lane j/w A14 Westbound Entry.

Summary: Risk of pedestrian trip type accidents.

The diversion route guides pedestrians to cross the A14 Westbound entry slip road. Vehicles were observed to be travelling fast when turning onto the slip road and pedestrians may be hurried when crossing. Pedestrians rushing to cross the slip road will be more vulnerable to trips resulting in injury, or worse still, subsequent collisions with vehicles.

Figure 2.2: A14 Westbound entry slip road (looking east).



Source: Mott MacDonald

Recommendation

It is recommended that a dropped kerb crossing point is provided to reduce the risk of pedestrians tripping. This can be positioned to guide pedestrians to the safest crossing location.

2.9.2 Problem

Location: Higham Road.

Summary: Risk of vehicle collisions with pedestrians.

Higham Road is a busy road providing access to the A14 westbound carriageway. The diversion route guides pedestrians along Higham Road from Coalpit Lane to the A14 on-slip. Traffic speeds were observed to be high and it is likely motorists will be accelerating towards the A14 on-slip. There is limited grass verge suitable for pedestrians who may be forced to walk within the carriageway which could result in collisions with vehicles.

Figure 2.3: Higham Road looking east.



Source: Mott MacDonald

Recommendation

It is recommended that a suitable footway is provided to enable pedestrians to continue along Higham Road without walking within the carriageway.

2.10 S27 – Barrels

The Audit Team did not identify any road safety related issues associated with the scheme.

2.11 S28 – Grove Farm

The Audit Team did not identify any road safety related issues associated with the scheme.

2.12 S69 – Bacton Blue and Green routes)

2.12.1 Problem

Location: Broad Road.

Summary: Risk of vehicle to pedestrian collisions.

The standard of verge varies along Broad Road with a minimal verge in places and several sections where vegetation is overgrown restricting the available width for pedestrians. This is likely to result in pedestrians walking within the carriageway. Traffic speeds were observed to be high particularly on the straight section and towards the southern end of Broad Road there is a sharp bend which may restrict forward visibility of pedestrians in the carriageway. These factors could result in collisions between vehicles and pedestrians.

Figure 2.4: Example of restricted verge on Broad Lane (looking south).



Source: Mott MacDonald

Recommendation

It is recommended that a suitable footway is provided to enable pedestrians to continue along Broad Road without walking within the carriageway.

3 Audit Team Statement

I certify that this audit has been carried out in accordance with the Highways England Departmental Standard HD 19/15.

Audit Team Leader

A J Coleman BA (Hons), MCIHT, MSoRSA

Signed: 

Date: 8th August 2016

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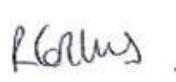
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Signed: 

Date: 8th August 2016

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Appendix A. List of Submitted Documents

Table A.1: Drawings

Drawing	Rev	Title
MMD-367516-S01-GEN-002	P3	Sea Wall
MMD-367516-S02-GEN-002	P3	Brantham High Bridge
MMD-367516-S04-GEN-002	P3	Island
MMD-367516-S05-GEN-002	P3	Pannington
MMD-367516-S14-GEN-002	P3	Steggalls
MMD-367516-S19-GEN-002	P3	Rectory Road
MMD-367516-S20-GEN-002	P3	Beecroft
MMD-367516-S21-GEN-002	P3	Abbotts
MMD-367516-S24-GEN-002	P3	Higham Ground Frame
MMD-367516-S27-GEN-002	P3	Barrels
MMD-367516-S28-GEN-002	P3	Grove Farm
MMD-367516-S69-GEN-002	P3	Bacton

Source: Mott MacDonald, Sheffield

Appendix B. Key Plans

