Essex Highways

Essex Highways Road/Rail Incursion Risk Strategy

2024

RINGWAY JACOBS | Essex County Council

Foreword - Supporting Road Safety: Vision Zero

Welcome to the Essex Highways Road/Rail Incursion Risk Strategy which sets out the steps to be taken jointly with railway infrastructure authorities to manage the risk of the accidental incursion of road vehicles onto the railway. This Strategy has been drafted with reference to the publication 'Managing the Accidental Obstruction of the Railway, Road Vehicles, Moving Britain Ahead', published by the Department for Transport in September 2020.

This Strategy supports the principles within the overarching Essex County Council Highways Maintenance Policy, published on the Essex Highways website, and describes the Council's approach to managing the accidental incursion of road vehicles onto the railway.

This Strategy takes account of the recommendations and best practice set out in the October 2016 'Well-managed Highway Infrastructure: A Code of Practice', published by the United Kingdom Roads Leadership Group (UKRLG, formerly called the United Kingdom Roads Liaison Group).

Managing the accidental incursion of road vehicles onto the railway has a positive impact on road/rail safety and therefore contributes to Road safety: Vision Zero. Vision Zero is the aspiration that there should be no deaths or serious injuries on the roads by 2040.

Cllr. Tom Cunningham

Portfolio Holder for Highways, Infrastructure and Sustainable Transport

Essex Highways' assets are currently managed via the Essex Highways strategic partnership, which is a collaboration between ECC and contractor Ringway Jacobs, which was formed on the 1st of April 2012.

This Strategy is a supplementary strategic document to the Highways Infrastructure Asset Management Plan (HIAMP) which forms the keystone of the Essex Highways Strategic Partnership whose objective is to deliver the Council's strategic priorities.

Both Essex County Council and Ringway Jacobs are committed to long term efficient and cost-effective management of Highways' assets, to deliver a transport system that supports sustainable economic growth and promotes the very best quality of life for the residents of Essex.

Tom Blackburne-Maze
Director Highways and Transport

Simon Butt
Operations Director

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1. Introduction

1.1 This Essex County Council (ECC) Road/Rail Incursion Risk (RRIR) Strategy, which hereafter will be referred to as the Strategy, has been introduced by maintenance engineers, inspectors, and other practitioners to take account of the recommendations and best practice set out in the October 2016 ‘’Well-managed Highway Infrastructure: A Code of Practice’ and subsequent amendments (which hereafter will be referred to as ‘the Code of Practice’).

1.2 Neither legislation nor the Code of Practice has set out or prescribed the minimum standards to be employed. The Code of Practice is designed to promote the adoption of an integrated asset management approach to highway infrastructure based on the establishment of local levels of service through risk-based assessment. It is up to each Authority to establish and implement their own levels of service to suit their circumstances.

1.3 After the road/rail accident at Great Heck, Selby, on 28 February 2001, when a vehicle came off the M62 motorway, ran down the railway embankment and onto the East Coast Main Line, the Secretary of State for Transport agreed to the 19 recommendations from the Health and Safety Commission and Highways England (formerly the Highways Agency, and now National Highways) about how best to mitigate as far as possible against similar accidental incursions in the future. This mitigation included a joint programme of work by highway authorities and rail infrastructure authorities to prioritise and assess the risk of a vehicle leaving the road and getting onto the railway at the sites for which they were responsible. They would then need jointly to consider and agree what measures might be appropriate and effective in helping to reduce the risk of this happening. The legal responsibility to assess the risks and provide any mitigation measures to prevent accidental incursions by road vehicles onto railway property falls jointly on a highway authority and a railway infrastructure authority.

1.4 The publication ‘Managing the Accidental Obstruction of the Railway, Road Vehicles, Moving Britain Ahead’, published by the Department for Transport in September 2020, offers guidance on how highway authorities and rail authorities can demonstrate that they have ranked sites where roads cross or run alongside railways according to their relative risk, and that they have considered how to manage that risk. Chapter 2 of this document refers to the

protocol ratified by the Local Government Association and Network Rail setting out the apportionment of responsibility and costs of improvements made at locations where roads meet, cross or run close to railways. Chapters 3 and 4 set out how to rank risk at all sites and assess the scope for treatment at the higher ranked sites. Scoring spreadsheets and guidance on their use accompany these chapters. Final decisions on the need for, and type of, treatment (and, therefore, the appropriate level of expenditure) rest with highway and rail authorities.

1.5 This Strategy advocates that ECC Essex Highways follows the general principles within the guidance document 'Managing the Accidental Obstruction of the Railway, Road Vehicles, Moving Britain Ahead', published by the Department for Transport in September 2020, but may depart from it where a competent Engineer determines its advice impracticable or unaffordable for the site in question.

1.6 This Strategy recommends reviewing the management of this area of risk as only part of the Council's overall approach to road safety and risk mitigation. For example, the Health and Safety Commission (HSC) report 'Obstruction of the railway by road vehicles' reached the following conclusions:

- Risk is small in relation to other elements of railway risk and tiny in relation to other elements of road risk, but it is nonetheless worth considering ways of reducing it;

- Schemes to reduce risks of road vehicles ending up on railway lines should not leapfrog other road and rail safety initiatives that would yield bigger safety improvements; and

- At many locations there may be nothing more to be done beyond what is already in place.

1.7 This Strategy is a supplementary, strategic document of Essex County Council Essex Highways Infrastructure Asset Management Plan (HIAMP) which is published on the Essex Highways website.

2. Purpose of this Strategy

2.1 This Strategy sets out the steps to be taken jointly with railway infrastructure authorities to manage the risk of the accidental incursion of road vehicles onto the railway. This Strategy has been drafted with reference to the publication 'Managing the Accidental Obstruction of the Railway, Road Vehicles, Moving Britain Ahead', published by the Department for Transport in September 2020.

2.2 This Strategy covers the identification of sites where roads cross or run alongside railways, and how these sites must be risk assessed and managed according to their relative risk-based priority. Note that the risk-based priority scores produced are designed to allow the risk evaluation of different sites to be compared; they should not be regarded as accurate measures of safety risk. They are merely means by which a highway engineer can explore the practicability of further risk mitigation, in conjunction with the railway infrastructure controller. Final decisions on the need for, and type of, treatment (and, therefore, the appropriate level of expenditure) will be arrived at jointlly with rail authorities.

2.3 This Strategy is most relevant to:

- road bridges over railways;
- roads running alongside railways; and
- cul de sacs ending at railways.

2.4 This Strategy does NOT cover Level Crossings.

2.5 This Strategy does NOT cover the accidental incursion of road vehicles onto another road (Road/Road Incursion Risk). For example, a vehicle could leave a local authority road from an over bridge and end up on a National Highway. In cases such as these, National Highways is co author of a guidance document which outlines asset management responsibilities relating to Bridges and Structures. Issues such as these fall outside of this Strategy.

3. Site Register, and Risk and Decision Information

3.1 The Confirm asset management system functions as an asset register for Road/Rail Incursion Risk Sites. It faciliates the assessment and recording of risk for each site using the approved risk assessment forms detailed in the publication referenced in 2.1 above, by enabling downloading of a site(s) to a hand held data capture device to be used for this purpose. The risk assessment form(s) facilitate the risk assessment process which highlights the highest areas of risk, identifies the potential sources of risk and identifies appropriate treatment.

3.2 The Confirm system will not only be used to record a risk score(s) for each site but will include the date of site visits and the identity of officer(s) involved in the risk assessment as well as a set date for the next review. Any drawings, notes, photos etc. employed will be attached to the Confirm site record, including a record of all findings, discussions and decissions. This will assist with effective management as well as purpose of audit.

3.3 Before any major planned changes on either road or rail at these RRIR sites, authorities should reassess the site under the proposed new conditions. The Confirm sysem will prompt a ‘notification alert’ if any Confirm Job for works is committed on or near a road section where the presence of a RRIR site has been recorded, so the impact on risk posed by the proposed works can be assessed. Note, however, that works relating to Structures are not commissioned via Confirm, and therefore a prompt will not be triggered. Instead, the Structures team has an electronic list of RRIR sites for point of reference when assessing the risk impact of any proposed Structures works.

3.4 When significant works are carried out on a road/rail interface site, such as reconfiguration of the road or railway layout, or large-scale tree clearance works etc., the risk ranking exercise will be carried out again to determine the site’s ‘new’ risk ranking score. The timing of the risk review will be at the discretion of the Engineer(s).

3.5 The assessment of risk, review of risk, and the identification and agreement to mitigation measures through joint working with rail authorities, must be undertaken by appropriately competent officer(s) who are familiar with the latest government guidance concerning these matters.

4. Identification of Road/Rail Incursion Risk Sites, and initial Risk Assessment

4.1 The Confirm risk register retains a record of all known RRIR sites across the county. However, not all known sites have been subject to an initial risk assessment.

4.2 The number of sites to be subject to initial risk assessment will be agreed with Essex County Council (ECC) Highways Commissioning on an annual basis. These sites will be identified by the Engineer through discussion with the relevant Rail Authority, with regard to the perceived priority of the site, such as sites where there have been recent incursions or where there is high rail or high traffic flows.

4.3 The frequency of undertaking a countwide review of rail and road assets with a view to identifying new RRIR sites within the county will also be agreed with Essex County Council (ECC) Highways Commissioning. However, the potential for the creation and subsequent identification of new RRIR sites will also be undertaken by Essex Highways when new highway assets are adopted, especially in the case of adoption of road assets. In addition, the potential for the identification of new RRIR sites will be considered where recommendations are made via Road Safety Audits, or where reports are received from the Road Safety Team, Essex Police or indeed any other oganisation or individual where safety concerns are raised regarding the risk of occurrence of Road Rail Incursion at specific sites.

5. Risk Management and Treatment Identification Process

5.1 The legal responsibility to assess the risks and provide any mitigation measures to prevent accidental incursions by road vehicles onto railway property falls jointly on a highway authority and a railway infrastructure authority.

5.2 As per the publication ‘Managing the Accidental Obstruction of the Railway, Road Vehicles, Moving Britain Ahead’, published by the Department for Transport in September 2020, the risk management and treatment

identification process are based on agreeing jointly with the rail authority in question:

- Identification of every appropriate RRIR site;
- Evaluating the risk of every site, such that it is given a risk score (where the higher risk sites are indicated by a higher score);
- Ranking the sites based on risk score;
- Assessing the cost effectiveness of measures to reduce risk at the higher scoring sites;
- Agreeing the measures to be implemented, if any.

5.3 Using the scoring procedure provided via the forms referenced in section 3.1 above, the highest risk ranking score is likely to be around 130. Sites with scores between 90 and 100 will be programmed for further, joint investigation. Lower scoring Sites, below 90, may also be investigated at the discretion of the Engineer to determine whether improvements can be made at low cost. The investigation programme time line will be agreed with Essex County Council (ECC) Highways Commissioning.

6. Identification of Risk Mitigation Measures

6.1 Appropriate risk mitigation measures will be agreed jointly with the rail authority for the site in question. This will incude the identification and apportioning of costs (generally each party will be responsible for its own costs). This will also include identifying timing and responsibilities relating to future inspections and maintenance to sustain fitness of purpose of the measures.

6.2 The inspection and maintenance of measures for which ECC Essex Highways is responsible, will be communicated to the appropriate service areas to ensure that locations and inventory details are added to inspection regimes and matinenance programmes. It is anticipated that the resources required to service these additional measures will not be significant and will be subsumed within current resources.

7. Identification of a Works Programme and Review of Effectiveness of Mitigation Measures

7.1 A works programme will be agreed jointly with the rail authority, having regard for the availability of Highway Authority funding. This will include a programme for a follow up site visit, to review the risk score jointly with the rail authority. A further site visit will be undertaken jointly after a satisfactory period from completion of works (a three year time interval is recommended), to verify the effectiveness of the mitigation measures as well as to determine what if any further mitigation works are required.

8. Identification of a Site Risk Review Programme

8.1 RRIR sites which have been subject to a joint risk assessment, will be subject to routine risk reivew to take account of any potential changes to the highway or rail infrastructure which may impact on risk, for which they have not previously been informed.

8.2 The number of sites for which a joint risk score has already been obtained, for which a risk review is to be undertaken jointly with the rail authority, will be agreed with ECC Highways Commissioning on an annual basis.

8.3 The site risk review programme will prioritise sites with the highest risk scores, or on a different basis if decided jointly by the Engineer and the rail authority in question, such as sites where there have been recent incursions or where there is high rail or high traffic flows.