# AGENDA

## Kent County Council

# REGULATION COMMITTEE MEMBER PANEL

**Friday, 24th November, 2023, at 1.30 pm**
**Bobbing Village Hall, Sheppey Way,**
**Bobbing, Sittingbourne ME9 8PL**

Ask for: **Hayley Savage**
Telephone **03000 414286**

**Membership**

Mrs S Hudson (Vice-Chairman in the Chair), Mr P Cole, Mr M C Dance, Peter Harman and Mrs L Parfitt-Reid

## UNRESTRICTED ITEMS

*(During these items the meeting is likely to be open to the public)*

1. Membership and Substitutes
2. Declarations of Interest for Items on the Agenda
3. Application to divert part of Public Footpath ZR681 from the foot crossing to a new route parallel to the northern platform at Teynham in the Borough of Swale (Pages 1 - 66)
4. Application to divert part of Public Footpath ZR109 from the foot crossing known as Simpsons Crossing at Bobbing in the Borough of Swale (Pages 67 - 118)
5. Other items which the Chairman decides are urgent

## EXEMPT ITEMS

*(At the time of preparing the agenda there were no exempt items. During any such items which may arise the meeting is likely NOT to be open to the public)*

**Benjamin Watts**
**General Counsel**

**Thursday, 16 November 2023**

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# Application to divert part of Public Footpath ZR681 from the railway foot crossing to a new route parallel to the northern platform at Teynham in the Borough of Swale

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A report by the Public Rights of Way and Access Service Manager to Kent County Council's Regulation Committee Member Panel on 22 November 2023.

**Recommendation: I recommend that the applicant be informed that an Order to divert Public Footpath ZR681 from the railway foot crossing to an alignment running parallel to the northern platform of Teynham Station in the Borough of Swale, will be made.**

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Local Member: Mr. Rich Lehmann Unrestricted item

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## Introduction and background

1. The County Council has received an application to divert Public Footpath ZR681 in the Parish of Teynham. The application has been made by Network Rail to remove a level crossing from the railway line in the interests of safety. The proposed diversion would move the Public Footpath to a route parallel to the northern railway platform, across land owned by Network Rail, as shown between Points A – C in **Appendix A**

2. The crossing is located just to the west of Teynham railway station, at the terminus of the station platforms. Teynham village is located to the south, and an outdoor education facility, called Creed Outdoor Learning Trust, is just to the north west of the crossing. This education facility is used throughout the year with a high number of children using the level crossing to access it.

3. A number of risk assessments have been carried out on this crossing, the most recent in December 2021. It should be noted that where this crossing is currently closed under a Temporary Traffic Regulation Order (TTRO) it comes off Network Rail's risk register. If the crossing were to be opened today (at the time of writing this report) it would be the second highest risk footpath crossing and also the second highest risk level crossing in Kent.

4. As part of a Network Rail Narrative Risk Assessment (see **Appendix D**) the risk score changed from C3 to B2, a significant increase. (See paragraphs 43 & 44 for context).

5. The number of train movements passing over the level crossing is averaged at 183 per day, with an up-line speed of 90mph, and a down-line speed of 75mph. It is noted that the up-line speed has been restricted to 80mph in an attempt to mitigate the risk at the level crossing.

6. The main concerns for Network Rail at the crossing are insufficient sighting, high level of users, misuse of the crossing, the proximity of the level crossing to a railway station, and a large number of vulnerable users, including elderly and children.

7. Due to the risks associated with the crossing, use of the footpath has been prohibited by a Temporary Traffic Regulation Order (TTRO) since December 2022. Initially it was closed under emergency closure, which was then converted into a full 6 month TTRO. This has recently been extended for a further year by the Secretary of State for Transport. In this regard, Network Rail has acted in line with the nationally agreed 2019 Memorandum of Understanding ("MoU") (**Appendix E**), acting with caution ahead of the implementation of any measures that are deemed appropriate to the level crossing. The Public Rights of Way and Access Service and Network Rail understand the inconvenience that the closure of the crossing has had on the community and are looking to provide the best solution possible.

8. The length of Public Footpath ZR681 to be diverted is shown by a solid black line between the Points A – B on the plan in **Appendix A.** The proposed new route is shown by bold black dashes between the points A – C, also in **Appendix A.** The proposed route will have a width of 2.0 metres.

9. An extract from the Definitive Map can be found at **Appendix B** to show the path in context with the rest of the public rights of way network.

10. A copy of Network Rail's application can be found at **Appendix C**, and a copy of the Narrative Risk Assessment can be found at **Appendix D**.

**Policy**

11. The Countryside Access Improvement Plan, Operational Management document (2013) sets out the County Council's priorities for keeping the Definitive Map and Statement up to date. The main priorities in respect of Public Path Change Orders are:

    Public Path Change Orders will normally be processed in the order in which applications are received, except in any of the following circumstances where an Order may be processed sooner:

    - Where it will satisfy one or more of the relevant key principles set out in paragraphs 4.14 – 4.25 of the CAIP Operational Management document.
    - Where an application has been made to the County Council in its capacity as Planning Authority.
    - Where the processing of an Order could save significant costs incurrent in other Rights of Way functions.
    - Where a Public Path Change Order is made concurrently with Orders made under Section 53 of the Wildlife and Countryside Act.

12. The County Council will take into account whether the following criteria are satisfied before promoting a Public Path Change Order. Irrespective of the

following, the statutory tests (as set out within the Legal Tests section) for changing public rights of way must apply.

I. The status of the route must not be in dispute at the time of the application unless the Public Path Order is being implemented concurrently with an application under Section 53 of the Wildlife and Countryside Act 1981.
II. The applicant must agree to meet the County Council's costs of promoting the Order and bringing the new path into a fit condition for public use.
III. The applicant must also agree to defray any compensation which may become payable as a result of the proposal.
IV. The definitive line should, where it is considered by the County Council to be reasonably practicable be open, clear and safe to use.

13. However, nothing in this policy is intended to prevent the County Council promoting a Public Path Change Order in any case where it considers it appropriate in all the circumstances to do so.

**Legal Tests – Rail Crossing Diversion or Extinguishment Order**

14. Legislation relation to the extinguishment or diversion of a public path at a rail crossing is contained within Sections 118A (extinguishments) and 119A (diversions) of the Highways Act 1980: The Procedure is in Schedule 6 of the same Act.
    (i) The Council may make an Order to extinguish or divert a public path if it is satisfied that it is in the interests of the safety of users or likely users of at-grade crossings.
    (ii) Particular consideration has to be given to whether or not it is reasonably practicable to make the existing crossing safe for the public and what arrangements will be made to erect and maintain barriers and signs at the closed crossing.

**Government Guidance**

15. Rights of way circular (1/09) Guidance for local Authorities – also states:

Rail crossing diversion Orders (Section 119A of the 1980 Act) Para 5.51

"While other criteria are not specified in section 119A, the new way should be reasonably convenient to the public and authorities should have regard to the effect that the proposal will have on the land served by the existing path or way and on the land over which the new path or way is to be created. Consideration should also be given to the effect that the diverted way will have on the rights of way network as a whole and the safety of the diversion, particularly where it passes along or across a vehicular highway."

**Consultations:-**

16. Consultations have been carried out as required by the Act:-

**County Member and Borough Councillors**

17. County Member Mr. Rich Lehmann and District Councillors Lloyd Bowen and Mike Whiting were consulted.

18. District Councillor Mike Whiting responded with an objection to the proposal. The points of objection are;

I. there had been no recorded deaths or accidents on the crossing, but there had been injuries and deaths recorded close to the newly proposed termination point of ZR681 (Point C, **Appendix A**).
II. The construction of a path behind the northern railway platform is unnecessary and could increase risk to people's security in the dark.
III. there is no pavement on the north side of Lower Road, the road the public would be required to walk to return to the other side of the crossing (Point B, **Appendix A**).
IV. Creed Outdoor Learning, which is situated to the north west of Public Footpath ZR681 would be affected by the diversion. No further details were given on what this entails.
V. Network Rail need to find other 'more effective' means for pedestrians to cross the railway line without such an increase in the distance the diversion entails. Mr Whiting suggests the installation of a bridge across the railway or a lockable gate would be preferable solutions.

19. Councillor Lloyd Bowen and County Member Rich Lehmann did not respond.

**Borough Council**

20. Swale Borough Council did not respond.

**Parish Council**

21. Teynham Parish Council responded with objections and comments, drafted from community responses to the proposal. The Parish state that Public Right of Way (PROW) forms an important, 'direct route between Teynham and Conyer', and is a popular walking route for pedestrians to reach the Saxon Shore path and public houses.

22. Teynham Parish Council note that the diversion route would increase walking time between Conyer and Teynham town centre by approximately 5 to 10 minutes each way. They also commented on safety concerns for people walking along the platforms. It is noted here that the diversion does not encourage the use of the platforms, as the proposed diversion is located on a separate stretch of land just north of the platform.

23. The Parish Council's objection mentioned the location of the Creed Outdoor Learning centre, to the north of the railway line, and how the diversion would negatively affect the company.

24. Recommendations were made that alternative routes, installation of safety equipment such as self-closing gates and improved signage, lighting and CCTV should be investigated.

25. A site meeting was held on Thursday 13 July with the Chair and Vice-Chair of Teynham Parish Council, a member of the Ramblers, a representative from Network Rail and PROW Officers to discuss the closure, including the points made above.

26. During the meeting the Parish Council expressed that they wished to investigate alternatives to the proposed diversion, such as increasing safety equipment on the crossing and that they considered the meeting a fact-finding mission. The representative from Network Rail, Operations Risk Advisor Gemma Kent, detailed the research undertaken on level crossing furniture. A breakdown of this can be found in the Narrative Risk Assessment in **Appendix D**.

27. One suggestion made was for access restriction furniture to be installed at the level crossing, similar to that at the vehicle level crossing located to the east of the station. However, Gemma Kent noted that no such furniture exists for a pedestrian crossing. She also commented that there was an increase in risk for such furniture, as it would prevent anyone from leaving the level crossing if the gates closed during use.

28. At the end of the meeting no agreement was reached between the parties, but the Parish Council did agree that there was a high level of risk at the level crossing.

**User Groups**

29. The Open Spaces Society, the Ramblers and the British Horse Society were consulted. The Open Spaces Society responded without objection. The British Horse Society did not respond.

30. Alan Smith, on behalf of the Ramblers, responded to the consultation with an objection. He noted misuse of the crossing, and questioned if the diversion would alleviate this as ‘misusers [will] still be able to access the line from the station platform and from the level crossing to the east of the station’. He also noted a low barrier to the west of the southern platform could be climbed over.

31. Mr. Smith also questioned the ownership of the land the proposed diversion would cross. The land is wholly within the ownership of Network Rail.

32. Prior to the diversion consultation Network Rail held two public consultations in Teynham to discuss the proposal with local residents. During the meetings two alternative routes were discussed that would cross land to the north of the railway, and Mr. Smith notes these are not mentioned in the diversion proposal. The land is outside of Network Rail ownership, so permission to create new Public Rights of Way would need to be sought from the landowner. Following consideration the alternative options were not taken forward.

**East Kent Area Public Rights of Way Team**

33. The East Kent Area Officer and Area Manager did not respond.

**Statutory Undertakers**

34. No objections were received from any Statutory Undertakers that responded to the consultation.

**Members of Public**

35. A total of 23 responses were received from Members of Public, of which one was in support of the diversion.

36. The response in support of the diversion expressed disappointment in the TTRO placed across the level crossing, but stated 'the proposed diversion by Network Rail behind the railway station's northern platform is a good and safer alternative and we welcome it.'

37. The objections made by Members of Public followed broad themes and have been collated and listed below. The number of respondents for each category of concern is also listed.

I. Network Rail's reason of safety is only an excuse used to divert the path. 11 respondents.
II. The road crossing by Public Footpath ZR239 (near Point C, **Appendix A**) is more dangerous than the level crossing due to road layout and/or the behaviour of cars. 9 respondents.
III. The length of the diversion is too long. 8 respondents.
IV. The diversion would negatively increase footfall along neighbouring Public Footpath ZR238. 4 respondents.
V. The proposed diversion behind the northern platform would be dangerous or too dark to navigate. 8 respondents.
VI. This same route would also suffer from littering. 4 respondents.
VII. Not enough was done to let local path users know about the proposed diversion and that consultation was minimal. 3 respondents.
VIII. The diversion route is unnecessary, the public should just be allowed to walk along the platforms. 1 respondent.
IX. Furniture should be implemented across the level crossing to improve safety, as an alternative to diversion. 9 respondents.
X. The diversion route could endanger animals kept in fenced fields near the proposed diversion. 2 respondents.
XI. The route is older than the trainline, therefore it should not be moved. 4 respondents.
XII. There have not been any recorded deaths on the level crossing, so there is no safety concern. It is worth noting that one respondent did claim to remember that there was a death near the crossing several decades ago. However, it was a Network Rail worker and not a local resident. 6 respondents.

The responses received do suggest opposition to the diversion proposal for a range of reasons, with a large number of respondents disagreeing with the closure for reasons of safety.

**The Case – proposed diversion of Public Footpath ZR681, Teynham**

38. In dealing with the application to divert a public right of way, consideration must be given to the following criteria of Section 119A of the Highways Act 1980:-

a) Whether it is in the interests of the safety of the users or likely users of at grade crossings.

b) Whether it is reasonably practicable to make the crossing safe for use by the public, and what arrangements have been made for ensuring that, if the order is confirmed, any appropriate barriers and signs are erected and maintained.

c) Whether the diversion order alters a point of termination of the path or way, if that point is not on a highway over which there subsists a like right of way or, otherwise than to another point which is on the same highway, or another such highways connected with it.

d) Whether the order should make provision requiring the operator of the railway to maintain all or part of the right of way created by the order.

39. To be taken into account but not listed as criteria under Section 119A of the Act but in Rights of Way Circular (1/09)

a) Whether the right of way will be reasonably convenient to the public.

b) The effect the proposal will have on the land served by the existing path or way and on land over which the new path or way is to be created.

c) The effect that diverted way will have on the rights of way network as a whole.

d) The safety of the diversion, particularly where it passes along or across a vehicular highway.

40. Those criteria are considered individually and conclusions drawn below:-

*a) Whether it is expedient in the interests of the safety of users or likely users of the crossing.*

41. A number of risk assessments have been undertaken by Network Rail, the most recent dated December 2021, with a follow up risk assessment due March 2023. The 2023 risk assessment has been put on hold as a Temporary Traffic Regulation Order (TTRO) has been applied to the level crossing.

42. The TTRO was made following a near miss in November 2022. A full 6 month closure of the level crossing was subsequently made. Recently this has been extended by the Department for Transport by a further year.

43. It is Network Rail's position that Level Crossings are risk assessed on a regular basis, or when risk is known to have changed, such as if a new housing development is being built or if the train timetable changes. The risk assessment process includes quantitative as well as qualitative risk assessment. In quantifying risk, Network Rail uses a risk model called All Level Crossings Risk Model ("ALCRM") which was developed collaboratively by the Rail Safety & Standards Board, Network Rail and others. This model provides a consistent method for assessing risk to crossing users, train passengers and rail staff. The model incorporates over 200 inputs relating to types of trains, number of trains, train speed, public usage, the crossing environment (location etc.), environmental factors (prone to fog, sun glare etc.), layout, sighting distance for approaching trains, incident history, user behaviours and the effectiveness of mitigations in place. The ALCRM reports two measures of risk: collective risk and individual risk of fatality. Collective risk includes total harm in terms of Fatalities and Weighted Injuries (FWI) – used throughout the UK rail industry – and the individual risk to a single typical user. Coupled with this, Network Rail incorporates qualitative assessment based on the structure expert judgement of the Level Crossing Manager.

44. In the most recent assessment, ZR681 scored a rating of B2, which means it has a high level of both individual and collective risk. This crossing, if it was reopened, would hold the second highest risk of any level crossing in Kent and the second highest risk of a footpath crossing in Kent. The narrative risk assessment can be found in **Appendix D.**

45. Two camera censuses were taken at the level crossing, one in 2019 and the most recent in March 2022. The latest census showed an increase in use of the level crossing compared to 2019 census, which also showed an increase in misuse. Through the censuses the number of daily users was averaged at 120 in 2019, and by 2022 the average had increased to 164.

46. Another substantial increase was in the number of vulnerable users. In 2019, 50 children were seen using the level crossing, 363 were recorded in 2022. As mentioned before, an outdoor education centre is located north of the railway and Teynham Village, so a large number of children may be expected to use the crossing. Dog walkers increased from 358 to 695, and there was a slight increase to elderly crossing users of 37 to 44. It is important to note that the 2019 census ran for 9 days, whereas the 2022 census ran for 14 days, so an increase in user numbers is to be expected. However, the substantial increase of children likely relates to the outdoor education centre and shows a pattern of change to the average user of the level crossing.

47. Safety incidents have been recorded at the level crossing, with three near misses recorded in 2022. The last near miss, recorded in November 2022, caused the train driver to apply the emergency brake as four males crossed in front of the train.

48. While most path users use the crossing safely and considerately, there has been a high level of misuse recorded on the level crossing. Some respondents to the consultation expressed that they have used the level crossing without incident for a number of years and that crossing safely is down to the individual. The high number of children using the crossing, categorised as being vulnerable, along with reported misuse by some children, indicates that such awareness of the danger and risk of the crossing is not inherent.

49. The crossing is located just to the west of the Teynham Station, with the crossing next to the terminus of the north and south platforms. An average of 183 trains use the lines each day, with just under half on the High Speed (HS1) route. The proximity to the platform means that when trains stop at the platform a clear line of sight of both lines is not possible. There is also the risk of level crossing users seeing a train stopped at the platform and assuming the crossing is safe not taking account of the potential use of the other track. Some trains along the lines do not stop at Teynham, and will continue at high speed.

50. Taking into account the number of trains along the line, the speed of the trains (a reduced speed of 80mph has been applied to the up-line and the down-line has a speed of 75mph), the proximity of Teynham Station and the number of recorded near misses and misuse, Kent County Council considers, on balance, it is expedient to divert the footpath in the interests of the users or likely users of the crossing.

*b) Whether it is reasonably practicable to make the crossing safe for use by the public, and what arrangements have been made for ensuring that, if the order is confirmed, any appropriate barriers and signs are erected and maintained.*

51. As part of Network Rail's Narrative Risk Assessment further safety measures were reviewed. A footbridge was considered but discounted, the land surrounding the level crossing is heavily built up on the south side, requiring land purchase. Steps would also limit some users from accessing the crossing, and there is not enough space for a step-free ramped bridge.

52. Overlay Miniature Stop Lights (OMSL) were also considered. These are essentially crossing lights with an audible alarm to assist path users with knowing when it is safe to cross. However, the proximity of Teynham Station and the increased complexity of train movements in the locale means that OMSLs are not suitable.

53. Integrated Miniature Stop Lights (IMSL) are similar to the above mentioned OMSL, but they are tied into the signalling system. However, the misuse seen in the census data, such as crossing users playing 'chicken' with the train, would not be expected to be reduced by such a system. Network Rail consider that the IMSL may even exacerbate misuse.

54. Demarcation, such as yellow decking and cats' eyes and the removal of steps were also reviewed, but the risk reduction would be minimal to the public and would not deliver a reduction in the ALCRM risk rating.

55. Further reduction of the line speed was also considered, but it is noted line speed reduction is only enacted in exceptional circumstances: a second, further reduction would not be feasible. Network Rail also note that any reduction in line speed results in financial compensation from Network Rail to rail providers.

56. As part of the TTRO, the raised crossing platform has been removed and fencing installed along the crossing point to prevent trespass. Network Rail has agreed to provide any signage required by the Council at the crossing (and any other points).

*c) Whether the diversion order alters a point of termination of the path or way, if that point is not on a highway over which there subsists a like right of way or, otherwise than to another point which is on the same highways, or another such highway connected with it.*

57. Public Footpath ZR681 currently terminates at its connection to Lower Road. The termination point would be altered by the Order to connect the footpath to Public Footpath ZR239, a point on another highway to the east.

*d) Whether the order should make provision requiring the operator of the railway to maintain all or part of the right of way created by the Order.*

58. Network Rail will maintain the surface of the new route, as Section 119A(6) of the Highways Act 1980 provides.

**Tests to be considered under Circular (1/09)**

*a) Whether the right of way will be reasonably convenient to the public.*

59. The convenience of the proposed diversion is one of the major objections from the public. The length of path to be diverted is approximately 21 metres long. The proposed diversion length is approximately 276 metres. This is only the increase of length to the Public Right of Way, if a member of public wished to return to the other side of the level crossing, they would be required to travel approximately 613 metres.

60. An issue with any diversion of a level crossing will always be the length of the alternative route. Railway lines bisect the land and limit options to cross safely. The closest and safest crossing location is via Public Footpath ZR239. A possible alternative crossing point, to the north-west, is of a further distance than the proposed, and would require permissions from multiple landowners to divert the PROW over their land.

61. Despite the length of the diversion route the land is of minimum gradient and crossfall meaning that despite the length the route is accessible for most path users.

62. Many of the public objectors note the path is used for the Creed Outdoor Centre, or for travel to and from Conyer, north of Teynham. It is worth noting there is another public footpath, ZR238, from Conyer that travels to Teynham, which would not be affected by the diversion. This path offers a more direct route to the crossing at ZR239 and would not require the public to double-back as would be required by the proposal, the route can be found in the Definitive Map extract in **Appendix B.**

63. The options for alternative diversion routes are limited, and of the available options, the proposed diversion is the most feasible.

*b) The effect the proposal will have on the land served by the existing path or way and on land over which the new path or way is to created.*

64. The effect of the new public right of way is to preclude the use of the land by the landowners for any purpose which is incompatible with the public's rights. This impact is acceptable to the landowners.

*c) The effect that the diverted way will have on the rights of way network as a whole.*

65. The diverted route will have the effect of providing continuous connection with public rights of way network as a whole, despite the increased distance.

*d) The safety of the diversion, particularly where it passes along or across a vehicular highway.*

66. The proposed diversion is considered safe for the public. The path primarily follows a route parallel to the northern Teynham Station platform, but it will be separated by the station platform's fence. The new termination point is at Station Row/ Public Footpath ZR239.

**Further Considerations**

67. In addition to the tests set out in Section 119A of the Highways Act 1980, the County Council must also have regard to the following issues when considering an application to divert a public right of way:

68. There is a relevant provision within the County Council's Rights of Way Improvement Plan at EN03 SAFE TRAVEL at 2.12 "Look to improve the safety of railway and road crossings where possible".

69. Under section 29 of the Highways Act 1980, the County Council has a duty to have regard to the needs of agriculture (including the breeding and keeping of horses), forestry and the desirability of conserving flora, fauna and geological and physiographical features. In this case, there is no adverse effect caused by the diversion of the path.

70. Section 40 of the Natural Environment and Rural Communities Act 2006 requires that every public authority must have regard "*so far as is consistent with the proper exercise of [its] functions, to the purpose of conserving biodiversity*". In this case, there is no adverse effect caused by the diversion of the path.

71. Where the affected land forms part of an Area of Outstanding Natural Beauty (AONB), section 85 of the Countryside and Rights of Way Act 2000 requires that the County Council shall have regard to *"the purpose of conserving and enhancing the natural beauty"* of the AONB. In this case the land does not form part of the Kent Downs or High Weald AONB and as such there is no adverse effect.

72. Under section 17 of the Crime and Disorder Act 1998, the County Council has a duty to exercise its functions *"with due regard to the likely effect of the exercise of those functions on, and the need to do all that it reasonably can to prevent, crime and disorder in its area*". In this case, there is no adverse effect caused by the diversion of the path.

73. The County Council is subject to the public sector duty regarding socio-economic inequalities set out in section 1 of the Equality Act 2010. An assessment in this regard has been undertaken. The new route will see an increase in walking distance to the public. The proposed diversion is limited due to the nature of the path crossing over a railway and finding safe alternative crossings. It is possible that the increase in walking length of the proposed diversion may limit use for the elderly or people with certain disabilities. Compared to a stepped bridge, which has the potential to exclude more path users, the proposed route is a more viable candidate. There is no other adverse impact on the use of the affected path as a result of the diversion.

74. Finally, in signing the application form the applicant has agreed to defray any compensation which may become payable following a successful claim made under section 28 of the Highways Act 1980.

**Conclusion**

75. It is considered that this case is finely balanced, but slightly weighted in Network Rail's favour. Network Rail does have a safety case and the tests under Section 119A of the Highways Act 1980 are met. Some members of the public that responded to the consultation object to the considerably longer route and its convenience.

76. Rail crossing orders are invariably finely balanced, especially when the reason is on a basis of safety. It is believed that Network Rails safety case needs

to be considered with greater weight. Two recent rail diversion orders, in Otford and Whitstable, were made where safety was noted as the primary motivator for the diversion. Should the committee conclude an order be made, we expect that Network Rail will lead a public inquiry, if necessary.

**Recommendation**

77. Therefore, it is recommended that the applicant be informed that an Order to divert Public Footpath ZR681 from the railway foot crossing to an alignment running parallel to the northern platform of Teynham Station in the Borough of Swale, will be made.

Accountable Officer:
Mr Graham Rusling – Tel: 03000 413449 or Email: graham.rusling@kent.gov.uk
Case Officer:
Mr Michael Tonkin– Tel: 03000 41 03 25
or Email: michael.tonkin@kent.gov.uk

The case file is available for viewing on request at the PROW & Access Service, Invicta House, County Hall, Maidstone, Kent, ME14 1XX. Please contact the Case Officer for further details.

**List of appendices**

Appendix A – Plan of diversion proposal
Appendix B – Extract from the Definitive Map
Appendix C – Copy of the application
Appendix D – Network Rail Narrative Risk Assessment
Appendix E – Memorandum of Understanding

Case file - PROW/ZR681/11/NR

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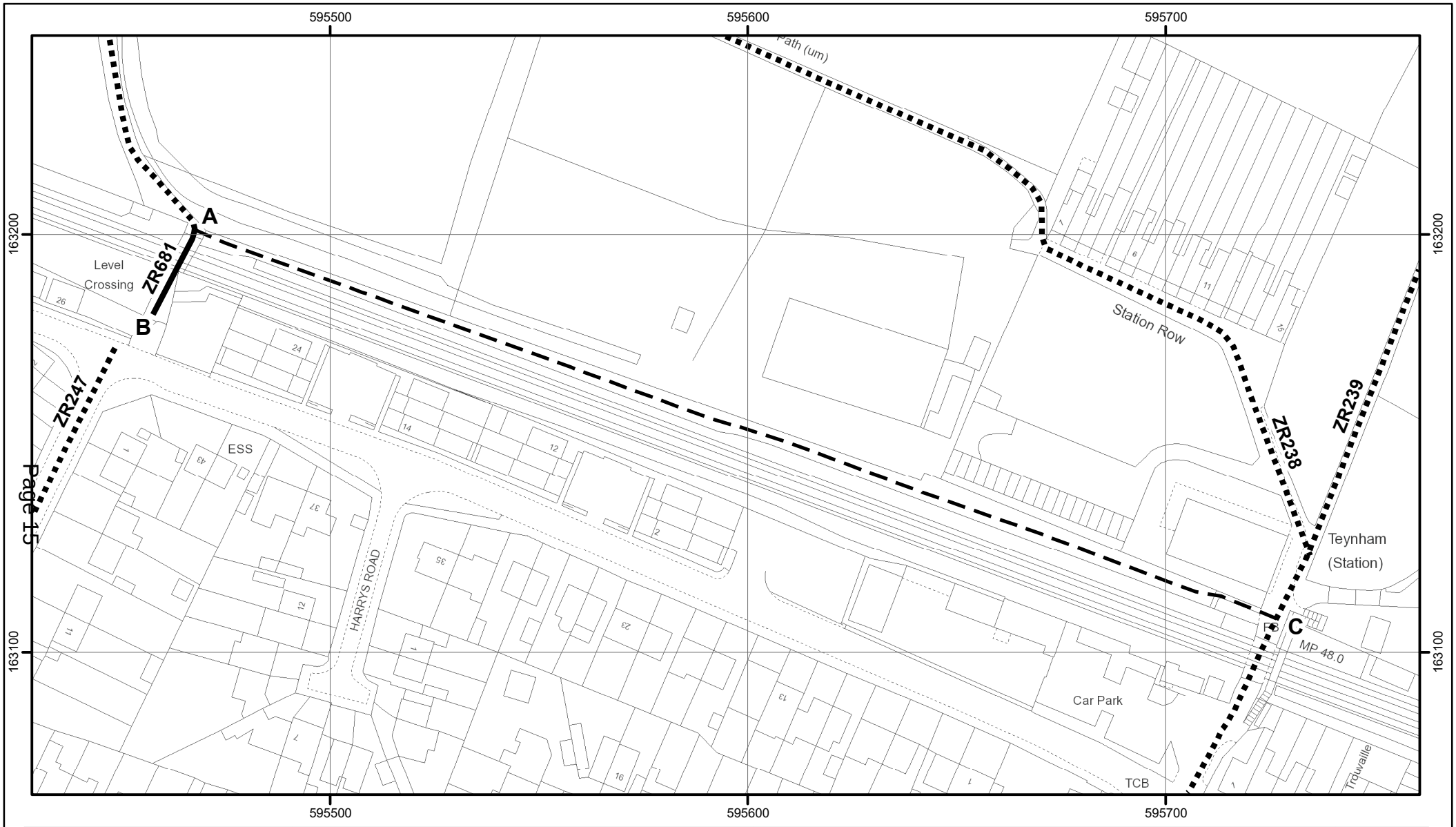




**Key**

- Route to be diverted
- New length of route
- Unaffected Routes

Highways Act 1980
Wildlife and Countryside Act 1981
The Kent County Council
(Public Footpath ZR681, Teynham)
Public Path Diversion and Definitive Map and
Statement Modification Order 2023

0 Kilometres 0.05 0.1
0 Miles 0.03 0.06

N

1:1,250

Produced by the KCC Public Rights of Way and Access Service


Public Rights of Way and Access Service

| Created by: | MRT | Checked by: | MMcN | Reference: | PROW/ZR681/11/NR |
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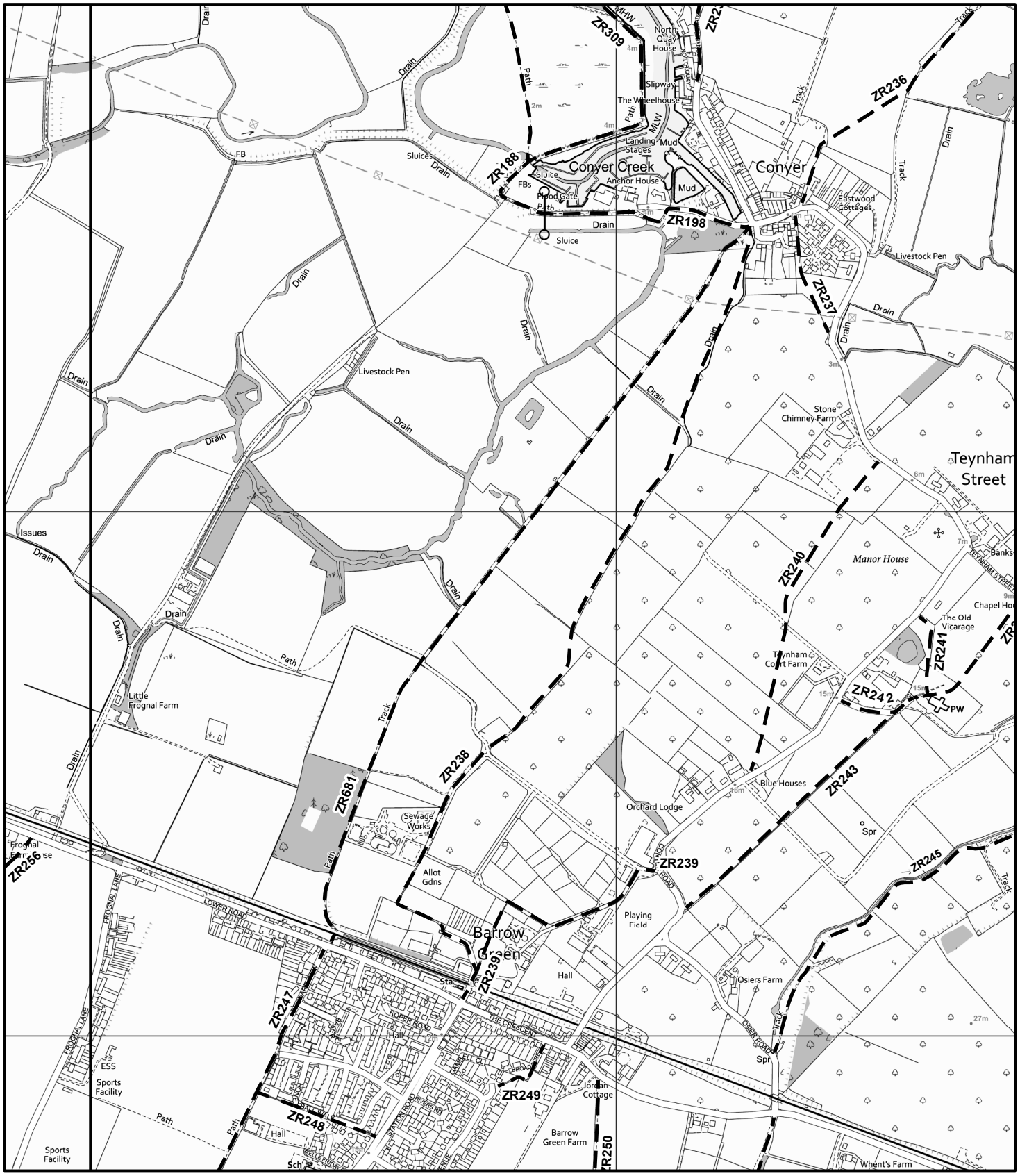


- Footpath
- Bridleway
- Restricted Byway
- Byway Open to All Traffic
- Point path number or status changes
- Boundary of area covered by 1:2500 scale Network Map
- Area covered by 1:2500 scale Network Map

**EXTRACT OF THE NETWORK COPY OF THE DEFINITIVE MAP OF PUBLIC RIGHTS OF WAY FOR THE COUNTY OF KENT**



**FOR REFERENCE ONLY – NO FURTHER COPIES MAY BE MADE**



Produced by the KCC Public Rights of Way and Access Service

| | |
|---|---|
| Created by: | MRT |
| Checked by: | MMcL |
| Issue Date: | 06/11/2023 |
| Reference: | PROW/ZR681/11/NR |

N

1:10,000

0 0.5 1 Kilometres

0 0.25 0.5 Miles



Kent County Council kent.gov.uk

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# Application Form

## for Diversion or Extinguishment of a Public Right of Way

PROW & ACCESS SERVICE

# Highways Act 1980

## Section 118A or 119A as amended by the Transport and Works Act 1992

**To be used in conjunction with Network Rail's – Crossing Closure Application Form.**

**For office use only:**

**Path number…….**

**Parish……**

**Schedule reference…….**

***Note: Please read Guidance Notes to help you complete this application***

## A. APPLICANT'S DETAILS

1. Full Name…Damian Hajnus……

2. Address…Network Rail Legal Services, 1 Puddle Dock, London, EC4V 3DS

……
……

3. Telephone number: …….. (mobile) 07720512712…

4. Email address: damian.hajnus@networkrail.co.uk…….

5. *Corporate customers only* -

Full company name (incl. PLC or Ltd) Network Rail Infrastructure Ltd

Purchase Order number:……

Accounts department email address to which invoice should be sent:

……

6. Do you intend to be represented by a professional agent? Yes [ ] No [X]

Name……N/A……..

Address……N/A……
……..……
Email address:.……N/A……..….
Telephone number ……N/A……..…….

Do you wish all future correspondence to be sent to: Self [X] Agent [ ]

## B. LAND OWNERSHIP AND OTHER INTERESTS

1. Are you the owner of all the land affected by your proposal?

Yes [X] No [ ]

*Please provide copies of the relevant Land Registry title documents with your application.*

If No, please provide the name and address of the other affected landowner(s) below and attach his/her written consent to this application.

N/A

2. Are there any private rights affecting the existing or proposed routes?

Yes [ ] No [X]

If Yes, please provide details below including exactly where these rights exist.

N/A

3. Are there any other occupiers of the land affected by your proposal (e.g. any tenants)?

Yes [ ] No [X]

If Yes, please provide the name(s) and address(es) below.

N/A

## C. EXISTING ROUTE

1. Path Number……ZR681 [Teynham West level crossing (the Crossing)]

2. Parish……Teynham……..

3. Is the Right of Way a: Footpath [X] Bridleway [ ] Byway [ ] Restricted Byway [ ]

4. Is the existing definitive route of this path open and unobstructed?

Yes [X] No [ ] Partially [ ]

If obstructed, please provide details of how, where and over what period of time, and indicate the location of the obstruction on the plan accompanying this application.

N/A

## D. YOUR PROPOSAL

1. What are you proposing?

Diversion [X] Extinguishment [ ]

*Please provide a 1:2500 scale plan indicating the extent of your landownership, the affected section of path and the proposed new route (where applicable) and the location of any existing and proposed stiles, gates or bridges.*

Plan A – Shows the diversion path (dashed black line), section of ZR681 to be extinguished (black solid line). Network Rail land ownership coloured bright green.

Plan B – Shows the footpath Proposed General Arrangement

2. What are the reasons for your proposal?
*Please provide as many details as possible as this will assist your application.*

## Background

Network Rail is an arm's length public body mandated to run the railway infrastructure in Great Britain. It operates subject to a strict statutory and regulatory regime. Some of its core duties are set out in its Operating Licence conditions, which critically compel it to run a 'safe and efficient' railway network.

In achieving this overarching aim, Network Rail is expected to, on one hand, identify and manage risks to its network, staff and members of public alike; on the other, to enhance the network where possible, thus ensuring that it operates at or as near to capacity as can be achieved.

Network Rail's regulator, the Office of Rail and Road, considers level crossings as the sole biggest source of catastrophic risk and advises Network Rail that the most appropriate means of dealing with such risk is, in line with the Health and Safety Executive's hierarchy of risk controls, its complete elimination.

In the context of level crossings, Network Rail's duty in respect of the risk is not an absolute one but one qualified by reasonable practicability. In consequence, Network Rail's threshold for risk level is As Low As Reasonably Practicable (ALARP) which means that the central objective of removing risks from the railway is further refined by factors pertaining to *reasonable practicability* i.e. objective constructability in both physical and, say, planning terms; commercial viability of a proposed solution, and, fundamentally; whether a proposed option offers value for money. This is in line with rail industry guidance contained in the Rail Safety and Standards Board (RSSB) document 'Taking Safe Decisions'.

This last factor underpins the options evaluation and selection process as it assesses, through the lens of Network Rail's obligations to the public purse, whether the level of investment proposed can be justified by the degree of elimination or reduction of risk it offers.

## Risk Assessment Model

Network Rail uses a comprehensive and extensive risk management system for all level crossings which includes two components:

1) Quantitative Assessment

A mathematical model called All Level Crossings Risk Model (ALCRM) allocates a relative risk score to each crossing; this is comprised of two elements:

- Individual risk, expressed by a letter on a scale of A to M where A represents the highest individual risk, and;

- Collective risk, expressed by a number on a scale of 1 to 13 where 1 represents the highest collective risk.

2) Qualitative Assessment

A Narrative Risk Assessment is complemented by the data fed into ALCRM by the Level Crossing Manager. It contains an assessment of the risk observed at a crossing, including but not limited to: line speed and train frequency, frequency and type of public use and misuse, sighting distances, environmental factors relevant to safety.

## Teynham West level crossing

The Crossing is situated on the Victoria to Ramsgate (VIR) line at 47miles and 65chains. Teynham is the nearest station. It is situated just west of Teynham station, it is under a mile away from Teynham centre and 4 miles from Sittingbourne.

The majority of the housing and local amenities are south of the Crossing, including Teynham Village Hall and Teynham Parochial CE Primary School. Most of the land north of the Crossing is rural or agricultural.

## Teynham West LC risk

The Crossing was expertly assessed in accordance with the model above as a **B2** thus representing a high risk of accident. It is currently ranked as the 10th highest risk level crossing of any type within the Kent route (out of a total of 339 crossings). For footpath crossings alone the Crossing is ranked as the 2nd highest risk footpath crossing out of a total of 172 footpath crossings).

The risk assessment identified the following key risk drivers:

1. Frequent trains;

There is an exceptionally high number of 183 trains per day travelling through the Crossing. 53 of these trains stop at Teynham station. This does not account for any ad hoc train movements.

Although trains are not timetabled to pass each other at the Crossing, incidents, disruptions, or unscheduled running can lead to trains passing the Crossing within 20 seconds of each other.

'Second train coming' phenomenon is a well-established source of serious accidents. Where trains pass each other in the vicinity of a crossing, this can lead to misjudgement, sometimes with tragic results. This is especially pertinent on busy, mainline railway lines such as the one on which the Crossing is situated.

The line speed is 90mph for trains in the Sittingbourne direction, and 75mph for trains in the Faversham direction. However, there is a temporary speed restriction of 80mph for trains running towards Sittingbourne to give users which Network Rail characterises as 'vulnerable' [more on

these at 3 below] sufficient time to cross[1]. The line speed and number of trains could increase in the future in line with government aspirations to increase passenger services on the railway. This is seems particularly likely when seen against the significant number of housing developments currently proposed in this area.

The braking distance for a train travelling at 75mph is 730 metres. This does not factor in the individual reaction time of the driver. There is a risk, based on comparable locations, that pedestrians will misjudge the speed of an approaching train and assess that they have more time to cross before the train reaches the Crossing than is in fact available to cross safely.

2. High number of users as recorded in the census taken in 2019;

A full 9-day camera census was commissioned by Network Rail in 2019. The census revealed that on average there are 120 pedestrians per day who use the Crossing. Cyclists, dog walkers, and children were recorded as frequent users of the Crossing. 14 incidents were recorded during the 9-day census.

There are also housing developments within Teynham that would very likely increase the level of use at this Crossing and consequently – risk.

3. Vulnerable Users

For the purposes of proper assessment of risk, Network Rail categorises certain user groups as 'vulnerable'. This is a broad catalogue of those whose perception and/or ability to act on risks is or is likely to be affected. Typical categories of Vulnerable Users include those with mobility issues (i.e. elderly, infirm or disabled, also encumbered i.e. carrying items); those whose ability to perceive risk (e.g. to hear and see an approaching train) is limited. This also extends to children and youth, whose appreciation and tolerance for risk is observably greater than that of adults, or to those whose attention is focused on other-than-train aspects of their traverse – this pertains to, say, mothers with prams, those using mobile phones/devices or dog walkers.

In comparison to the typical user, a vulnerable user is one who is likely to take an extended time to traverse the crossing due to disability or distraction and/or might be at greater risk of harm due to their perception of risk and will require additional time to cross safely. A typical user requires a minimum of 12.7 seconds to cross safely (length of the Crossing x 1.2 m/s).

For vulnerable users, Network Rail applies 50% to the traverse time and an additional second for the step up to the Crossing. Therefore, a vulnerable user is expected to take at least 20.5 seconds to safely traverse the Crossing.

At the Crossing, there is a high-proportion of users who are classed as vulnerable. During the 9-day census in September 2019 there were 50 children, 37 elderly adults, 19 pushchairs, 65 cyclists

[1] A detailed 9-day census identified a high proportion of vulnerable users necessitating an increase of 50% to the required time to cross safely. Since the Crossing has whistle boards, these could not be properly positioned [at the maximum distance of 400m from the Crossing] to give enough warning time for vulnerable users to cross safely. In consequence, exceptionally, a TSR (speed restriction) was imposed to ensure efficacy of whistle boards. This causes a 55.34-minute delay per day and creates liability for NR to compensate train operators

and 358 dog walkers recorded as users at the Crossing. Furthermore, during an informal drop-in session with residents Network Rail learned that children (accompanied by adults) use the Crossing to access Creed Outdoor Learning centre, which is situated north of the Crossing.

The census report noted several hazardous behaviours by vulnerable users, this included children sitting on the crossing deck, as well as walking on the trespass guards, people using their mobile phone whilst traversing the crossing and groups of children standing on the crossing. This was captured in CCTV footage.

## 4. User Behaviour

The Crossing is a site of near miss events, there have been at least 14 recorded safety incidents at the Crossing since 2017. At least 2 of these incidents are classified as near misses. A high proportion of these incidents involve vulnerable users such as children and elderly pedestrians.

More recent events include near misses on 15 February and 04 April 2022, combined with trespass and vandalism events on 22 February 2022.

Together with significantly high number of users and the regular occurrence of misuse incidents at the Crossing. The misuse incidents typically involve users who are classed as vulnerable.

The last risk assessment for this Crossing was triggered by a near miss in August 2020.

Other behaviour-related safety risk at this Crossing include:

a. A group of pedestrians may follow one another onto the Crossing without looking out for oncoming trains themselves, especially if they are distracted e.g. chatting;
b. A pedestrian may assume that a train will slow down to stop at Teynham Station when it may actually be a non-stopping train for this station. The majority of trains on the VIR through Teynham do not stop at Teynham Station. False perception of the *actual* speed of approaching train is a regular phenomenon and a recognised source of risk;
c. Users with visual or hearing impairments are likely find it difficult to use the Crossing safely as it relies on users being able to see and hear approaching trains;
d. A user may misjudge the speed of an oncoming train and believe they have sufficient time to cross when that is not the case;
e. Users may trip, fall, or collapse whilst traversing the Crossing, the relative ability to recover oneself by a Vulnerable User is further limited when compared to an able bodied user;
f. Users with dogs can become distracted and dogs on a lead can impact on user's movement either slowing them down or dragging them forward. In addition, dogs not on a lead could possibly run onto the railway

## 5. Limited sighting distance/proximity of the station

Towards Faversham, the minimum sighting distance required to cross safely at this Crossing is either 499 metres or 415 metres depending on the side of the Crossing from which the pedestrian is travelling.

The maximum measured sighting distance towards Faversham is 464 metres and is only achievable due to the temporary speed restriction that is currently in place. Absent the TSR, the measured sighting distance would be shorter still.

On busy lines with multiple tracks, or where trains pass each other at close proximity to level crossings, there is a significant risk of a passing train obscuring visibility of an approaching train on the opposite line, which is believed to have been a contributory factor at a fatal accident earlier this year at Lady Howard footpath crossing close to Epsom. This risk is compounded at crossings close to stations because stationary trains can block visibility for extended periods of time, and people rushing for trains might be less vigilant for their safety.

Due to the close proximity to Teynham station, trains stopped in the platforms can, and often do, completely obscure any trains travelling on the opposite line. When stood on the downside with a train stopped in platform 2, users are unable to see trains travelling on the up line.

This translates into a significant risk to a pedestrian wishing to cross; having waited for the first train to pass, a member of public can step out into the path of the second train which they have not been able to see or hear as it has been obscured by the first train. This, already significant risk is even greater when users are rushing to get to the station, which is far from an uncommon phenomenon generally, as well as at Teynham specifically.

Sighting from the Crossing can also be further obscured by commuters waiting on the platforms, which can also be a source of distraction to anyone using the Crossing.

Other known obstructions are station furniture such as platform ends and a railway building on the north side of the railway.

There are whistle boards at the Crossing (aimed to compensate for sighting deficiencies) which can however only mitigate the risk to a very limited extent. The incidents of misuse and near misses demonstrate that the whistle boards do not properly mitigate, still less prevent, against the safety risks at this Crossing.

## Options considered

### Diversion via a footbridge

It has been considered and rejected on the basis of failing the cost benefit analysis, prohibitive cost (min. £1.2m for a stepped structure and c£2.5m for a ramped one) and objective constructability and planning issues – availability of land or proximity to neighbouring properties with consequential overlooking and in keeping with its surrounds issues.

### Miniature Stop Lights

Network Rail has two main options of Miniature Stop Lights (Red/Green) lights available to them:

1. Overlay Miniature stop lights (OMSL)(c£200k)

   This option gives users a warning of a train approaching by displaying a red and green light as well as audible warning at the crossing. The Overlay systems are designed for

plain line railways, where there are no stop signals, strike ins and stations. As such, due to the complexity of the signalling in the area and the proximity of the station, this option is not feasible.

2. Integrated Miniature stop lights (MSL) (c£800k)

   As with Overlay MSL, this option gives users at the crossing a warning of train approaching by displaying a red and green light with audible warning. Due to the complexity of the signalling in the area and the close proximity of the station, an overlay system is not feasible and so MSL's would have to be fully integrated into the signalling system. This type of standalone project will incur all overheads associated with complex and in-dept altering of the signalling system, as well as ongoing operational costs.

   Installing MSL's (red/green lights) at this location wouldn't sufficiently mitigate, let alone completely eliminate, the risks and does not mitigate against user behaviours commonly seen at Teynham West.

Extinguishment

Whilst the most financially attractive option, this would deprive members of public of what is a popular local route and would be unlikely to attract the support of the order making authority, sufficient to make an order.

## Options not considered

Reduction of line speed

Network Rail's core regulatory obligation is to ensure, insofar as reasonably achievable, that the railway is safe for passengers, staff and members of public alike whilst ensuring that the network is maintained to a level where it can operate at maximum capacity.

This central duty clearly translates into an obligation to run a network which allows for as many train movements on any part of the network, on a tight timetable, at or as near as possible to line speed.

Line speed in this context means that the railway infrastructure at a given section of a given railway line is capable of accommodating safe train movements at that line speed. Secondly, in light of Network Rail's strict duty to run an *efficient* railway network, line speed is no mere speed restriction but rather an aspiration which is one of the key factors indicating the state of maximum efficiency/capacity of a railway line.

Where Network Rail's obligation to manage and eliminate risks is concerned, especially in relation to level crossings, there is a range of risk mitigation and elimination measures available to Network Rail, from simple audible warnings i.e. whistle boards on their own or in a combination with Secondary Audible Warning Device (already deployed at the Crossing and not effective) through warning lights (see above) to complete closure. Having developed, over the

years of observation and assessment, a comprehensive risk profile of the Crossing, Network Rail's expert view (as outlined in both the NRA and this application) is that mitigation measures, or a combination thereof, are unlikely to be effective and some of the closure options are prohibitively expensive and/or challenging to build.

Against this backdrop, reduction of speed of trains does not feature as a viable (or appropriate) mitigation measure and there is no reliable data to support a claim that reduction of speed of trains can achieve risk mitigation[2].

At the Crossing there is a temporary speed restriction of 80mph on the up line which was not deployed as (or intended, nor could it be) a proper risk mitigation measure but rather an emergency and strictly temporary, short-term measure intended to bring the Crossing within the minimum prescribed safety compliance. It was introduced as a strictly reactive measure, following the 2019 census which revealed a concerningly high number of users which Network Rail characterises as 'vulnerable'[3], pending development and implementation of the permanent and effective risk mitigation measure.

Further, in the expert view of this crossing's risk assessor, even if reducing the train speed further was available to Network Rail, it is not an appropriate, still less effective, measure to counteract the risk and, especially, the user behaviour observed at the Crossing. It would therefore not reduce the risk at the Crossing to an ALARP level and have no impact on the risk of the Crossing.

## Consultation carried out

Network Rail appreciates that its proposals, especially to close level crossings, can have an impact (albeit insignificant, if any, in the present) on our neighbours and members of public using the public paths network alike.

This is why Network Rail has consulted comprehensively at an early, pre-application stage, including Kent County Council, and held two public meetings in Teynham where both the proposed diversion and other options considered were presented and discussed at length.

The proposed diversion has also been discussed with key prescribed organisations such as BHS, OSS or Ramblers Association.

It is worth underscoring that public consultation for validity requires that the applicant consults on what it actually proposes to carry out. In this light the options set out here were put to consultees in the interests of completeness and transparency while the focus of the consultation was, properly, the subject matter of this application.

During both public events organised in Teynham there was a clear and pronounce sentiment against closure with some voices in favour.

[2] *the only* piece apparently challenging this observation is Order Decision ROW/3253077 (Bailey Lane LC) but Inspector's observations are made, notably, absent *any* evidential basis (whether in the body of evidence before the Inspector or referred to in the OD) and lack specificity.
[3] Vide e.g. para 2.1 of NRA for more detail

The main material points raised by those present were:

1. Diverted route would be fundamentally safer than the current crossing;
2. Diverted route would be uninterrupted by very frequent train movements;
3. Diverted route could be less safe as it is hidden behind the platform – in response: the new route would follow a straight line with no hidden corners, will be located in a public space between residential buildings and station platform and lit;
4. Potential for (more) antisocial behaviour encouraged by the diversion route, this was of concern especially/solely to the stable owner. In response: Network Rail is open to deploying at its expense reasonable mitigation measures to ensure privacy and to prevent trespass

**Conclusion**

Closure of the Crossing would eliminate the abovementioned risks by diverting pedestrians away from the railway line. There will be fencing at the site of the Crossing in order to prevent trespass and any signage required by the Council can be provided.

3. What is the proposed width of the new route (where applicable)? 2 metres

*A minimum of 2 metres should be provided for footpaths, 3 metres for bridleways and 4 metres for restricted byways. If the path is to be fenced, an additional 0.5 metres will be required. Where the Definitive Statement records a width for the existing path then it is that width which must be provided for the new route. However, Kent County Council may specify a lesser or greater width where it considers it expedient to do so.*

## E. WORKS

1. Please indicate on the plan and detail below any works that may be required to bring the new route into a fit condition for public use (eg clearance of trees, undergrowth, demolition of buildings, making up ground, drainage, surfacing, fencing, steps, ramps).

*Please read in concert with attachments Plan A and Plan B*

Works along the blue dashed line

Network Rail will carry out deep vegetation clearance from the area of the proposed path along the rear of platform 2, between the platform wall/fence and the existing boundary fence. Network Rail will clear all arisings from site and apply Herbicide treatment to complete the area.

Network Rail will supply and construct a new 2000mm wide path between the proposed access adjacent to the existing Downside approach to Teynham West Footpath Crossing and to the start of the existing garages – approximately 187 linear metres. Path will be constructed of 150mm thick compacted MOT Type 1 – laid on geotextile membrane, with a granno dressing to finish. All edgings to be C24 Treated Timber edgings laid to correct line and level. This footpath will be fenced on the platform side with a 1.8m high chainlink fence. Re-positioning of railway assets will be undertaken where required to facilitate the fence/footpath.

Works between points A and C

Network Rail will carry out remedial works to support the existing platform fence towards the country end of platform 2 by installing new I Beams to allow the removal of existing bracing supporting the existing fence. Network Rail will supply and construct new fencing from the start of the neighbours' garages to the station entrance (end of path) – approximately 60 linear metres. Within the country end area of the mature tree area, clear the general area to allow a footpath to be constructed. Three trees with multi stems have been identified for pollarding to create the footpath.

*Any works carried out in connection with the Orders will have to meet the County Council's specifications and standards.* ***No works should be carried out until the Order has been confirmed.*** *Works must then be completed within 28 days of the Order being confirmed, or within a suitable period agreed with the Order Making Authority and prescribed in the Order.*

## F. LOCAL CONSULTATIONS

1. Consultees will require access to inspect the proposed route. Do they need to make contact with anyone before doing so?

Yes [X] No [ ]

If yes, please give details below:

Name…Gemma Kent……..

Address……..……..

…….

…….

Telephone number …… 07801902008 ……

*Please note that this information will be included on the consultation letter and will therefore be available to the public.*

## G. YOUR APPLICATION

1. I apply to change the Public Rights of Way network as indicated in this application form and as shown on the attached plan. I undertake to meet the County Council's full costs and all advertising costs in promoting the Order whether or not it is successful. Furthermore, if I withdraw my application at any stage, I also undertake to meet the County Council's full administrative costs and any advertising costs up to that point. The County Council will use its best endeavours within the statutory framework to bring your proposal to an early conclusion although it cannot guarantee the eventual outcome.

2. (a) I undertake to meet the County Council's full costs for carrying out the works necessary to bring the new path into a fit condition for public use.

or

(b) I undertake to carry out the necessary works myself or by employing a contractor to bring the new path into a fit condition for public use to the County Council's satisfaction. I also undertake to meet the County Council's full costs for the delivery of furniture, installing any necessary fingerposts and/or waymarking the new path.

Please be advised that if the necessary works are not completed to the required standard within 3 months of the Order being confirmed (unless agreed otherwise) then the County Council reserves the right to undertake the works and recharge you the full costs for carrying out those works.

3. I undertake the responsibility of cooperating in a timely manner with the County Council and assisting in the process where requested by the case officer. The County Council reserves the right to cease to process an application where the applicant fails to meet reasonable response deadlines set by the Case Officer (and an invoice will be raised for works undertaken to date).

4. I undertake to indemnify the County Council against claims in accordance with relevant Provisions of the Town and Country Planning Act 1990 and the Highways Act 1980 in respect of compensation for depreciation in value of an interest in land or for disturbance in enjoyment of land consequent upon the making of an Order;

5. I undertake to indemnify the County Council against any expenses incurred by the Council in connection with the making and confirmation/certification of any Order that may be made in respect of this application.

6. I certify that I have sought and obtained permission from all other landowners affected by this proposal (where applicable) as detailed in section A.

7. I note that this application cannot be treated as confidential and a copy of this form and any accompanying documents may come into the public domain at any time. A copy of this form and any accompanying documents may also be disclosed upon receipt of a request for information under the Environmental Information Regulations 2004 or the Freedom of Information Act 2000.

8. I give consent for the personal details that I have provided in this application form to be stored, as part of the original application form, on the relevant footpath file indefinitely.

**Signature of applicant and all registered landowners**

**Signature** Damian Hajnus…… **Date** 06 December 2022

**NAME IN CAPITAL LETTERS PLEASE** Network Rail Infrastructure Limited

**Please ensure that the application form has been completed in full and is accompanied by a plan of the proposal at a scale of at least 1:2500, preferably based upon an Ordnance Survey Map extract providing you comply with their Copyright conditions. The plan will need to show the entire length of the existing path(s) concerned in a solid line and the proposed new route(s) in bold dashed lines, together with the location of any stiles, gates, bridges, culverts or other works necessary to bring the new route into effect. The extent of landownership(s) will also need to be shown on the plan and proof of ownership provided.**

# tnPASSIVE LEVEL CROSSING RISK ASSESSMENT

## 1. LEVEL CROSSING OVERVIEW AND ENVIRONMENT

### *1.1 LEVEL CROSSING OVERVIEW*

This is a planned risk assessment for Teynham West level crossing.

| Crossing Details | |
|---|---|
| **Name** | Teynham West |
| **Type** | FPW |
| **Crossing status** | Public Footpath |
| **Overall crossing status** | Open |
| **Route name** | KENT |
| **Engineers Line Reference** | VIR 47m 65ch |
| **OS grid reference** | TQ954632 |
| **Number of lines crossed** | 2 |
| **Line speed (mph)** | 90 |
| **Electrification** | DC |
| **Signal box** | FAVERSHAM |

| Risk Assessment Details | |
|---|---|
| **Name of assessor** | Gemma Kent |
| **Post** | Level Crossing Manager |
| **Date completed** | 06-12-2021 |
| **Next due date** | 07-03-2023 |
| **Email address** | Gemma.Kent@networkrail.co.uk |
| **Phone number** | 07801902008 |

| ALCRM Risk Score | |
|---|---|
| **Risk per traverse risk** | B |
| **Collective risk** | 2 |
| **FWI** | 0.025583378 |

## 1.2 INFORMATION SOURCES

The reference sources used during the risk assessment included:

- Geo-RINM
- SMIS
- Trust
- KCC rights of way map
- Google Maps
- NESA
- RSK camera census

## 1.3 ENVIRONMENT

| Approach Photos | |
|---|---|
|  |  |
| Up side crossing approach | Down side crossing approach |

The environment surrounding Teynham West level crossing consists of Town or village etc on one side of the line

It is a Public Footpath level crossing which is a principal access route for users travelling to a nearby station or ticket machine.

At Teynham West level crossing the orientation of the road/path from the north is 20°; the orientation of the railway from the north to the up line in the up direction is 110°.

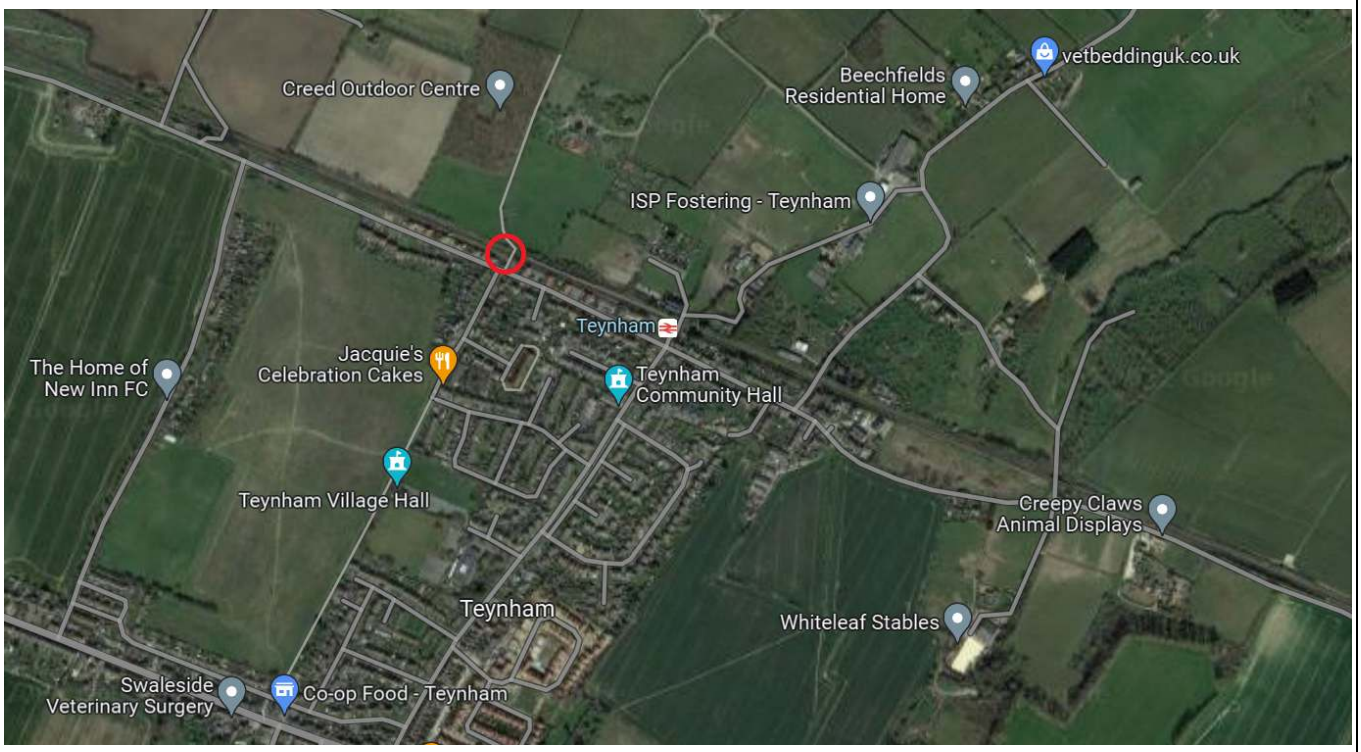
*Site visit general observations:*

Teynham West Footpath crossing is located on footpath number ZR681 in Teynham, Kent at the west end of Teynham Station, half a mile from Teynham centre and 4 miles from Sittingbourne. Teynham is a large village situated between Faversham and Sittingbourne and has a population of around 2,900.

On the up (south) side the footpath leads from Lower Road and gives access to platform one of Teynham station before the crossing. The area on the North (Down) side of the crossing is rural and is popular with walkers and dog walkers who use a circular walk coming out on Station Row and over Teynham East CCTV crossing. Platform 2 of Teynham station can also be accessed from north side of the footpath.

The village and housing estates are on the South (Up) side of the crossing, including Teynham Village Hall and Teynham Parochial CE Primary School.

The Creed Outdoor learning centre is situated on the north (down) side of the crossing and from speaking with the founder and with evidence from the camera census, it is known that a high amount of the children and youths attending the centre use the crossing to access daily.




The crossing is adjacent to Teynham Station and both platforms can be accessed from the footpath, because of this the crossing has peak use at both ends of the day. The platforms can also be accessed from the station entrance at the east of the platforms as well as Teyham East CCTV crossing, where there is also a footbridge.

There is ambient light coming from around the platform entrances as well as the platforms and some ambient noise from Lower Road.

There have been approx. 20 new houses built on the south side of the railway, adjacent to Teynham crossing , but this has not been seen to have a big impact on the crossing. There is a local plan to develop the area to the South-west of the crossing around Frognal Lane. The Planning application is for a mixed use development including up to 300 dwellings, employment area, sports ground, open space, reserve site for health centre and wildlife areas. This is very likely to create increased use over the crossing as this will be the most convenient access to the station for those commuting to or from the proposed development as well as access from the local village of Conyer on the north side of the crossing

## 2. LEVEL CROSSING USAGE

### *2.1 RAIL*

The train service over Teynham West level crossing consists of Passenger and Freight trains. There are 183 trains per day. The line speed (as shown on the Sectional Appendix) is 90 mph on the up, however it was temporarily reduced to 80 mph as an interim measure intended to counteract significant public safety issues observed at the crossing

A CCTV camera census conducted in 2019 revealed a high number of vulnerable users (which included dog walkers, elderly and encumbered users as well as children) and a high proportion of users misusing the crossing. Against this new information, the crossing was no longer compliant with the prescribed minimum safety standard in terms of sighting distance required to cross safely.

Factoring in the 2019 census data, the required minimum sighting distance for a train approaching at 90mph, when looking for up direction trains is 483m, against only 440m measured.

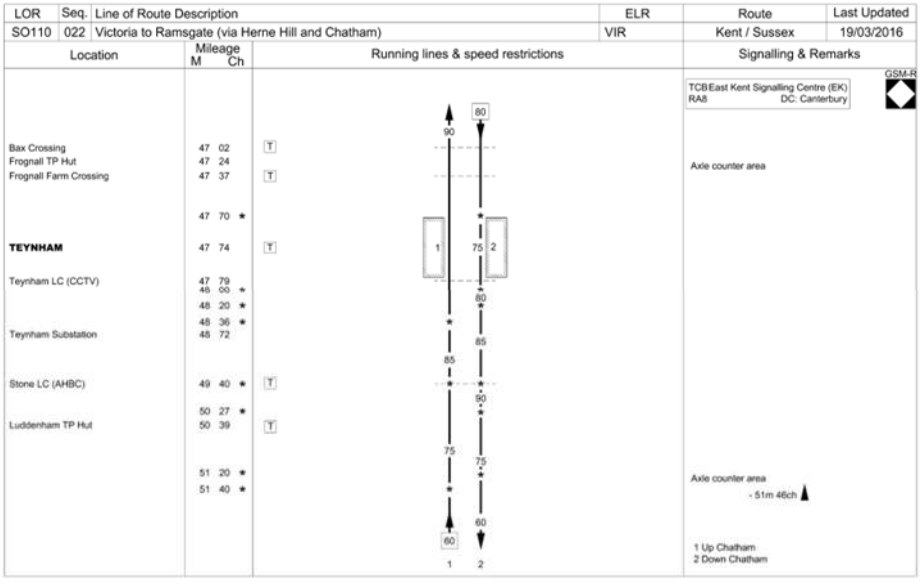
Consequently a temporary (emergency) speed restriction (TSR) of 80mph was implemented to compensate for the sighting deficiency and to allow more time to see an approaching train and to cross safely or get to a position of safey, whilst a permanent solution was being developed. This is detailed further in section 3.1.

On the down line the line speed is 75 mph. Trains are timetabled to run for 24 hours per day.

***Assessor's notes:***

The crossing is located on the Victoria to Ramsgate (VIR) line between Sittingbourne and Faversham stations.

Sectional Appendix Extract
Source of information for Line speed= National Electronic Sectional Appendix SO110 Seq 022




All passenger trains are operated by the Southeastern franchise.

- The first group of 87 trains are all up direction trains capable of travelling 90mph.
- The second group of 88 trains are all down direction trains capable of achieving 80 mph.

- The exception is the third group which are the class 465 and 466 multiple units which have a maximum speed of 75 mph, there are 8 of these trains in a 24 hour period.

53 out of 183 trains are booked to stop at the station on an average weekday, this variation of stopping and non stopping trains can cause users of the crossing to misjudge whether the approaching train will be stopping at the station or not and also at what speed the train is approaching the crossing.

Just under half the trains are part of the high speed one (HS1) services operating between St Pancras and Faversham / Thanet area using 6 or 12 coach long class 395 electrical multiple units. The remaining rolling stock are used on the traditional Southeastern routes and are formed of Electrical Multiple Units. They are class 375 (or 377), 465 and 466 units. Trains are formed of various lengths from 2 coaches (40 metres) to 12 coaches (240 metres).
All passenger trains are powered by the third rail at 750dc
There is no booked freight traffic over this crossing.

## *2.2 USER CENSUS DATA*

A 14 day camera census was carried out by RSK between 10-03-2022 and 23-03-2022. A 14 day average was taken. The census applies to 100% of the year.

The census taken on the day is as follows:

| | |
|---|---|
| **Pedal / motor cyclists** | 0 |
| **Pedestrians** | 164 |
| **Horse riders** | 0 |
| **Animal herders** | 0 |

*Assessor's general census notes:*

A RSK 14 day camera census was commissioned for this risk assessment, this saw an increase in use from the previous census conducted in September 2019 by Sotera where there was an average of 120 users per day.

Available information indicates that the crossing has a high proportion of vulnerable users.

***Vulnerable user observations:***

There is a high proportion of vulnerable users seen using the crossing. Out of the 2266 users over the 14 day period, 363 users were children, 695 dog walkers, 44 elderly or mobility impaired and 61 were encumbered or pushing a bike or pram

Available information indicates that the crossing does not have a high number of irregular users.

***Irregular user observations:***

| |
|---|
| There is not a high amount of irregular users. Many of the users seen are regular dog walkers, children attending the outdoor learning centre on the north side of the crossing on a daily basis or regular commuters for the station. |

***Site visit night / dusk user observations:***

| |
|---|
| There was not a high amount of users seen during the hours of darkness however some use was seen. |

## *2.3 USER CENSUS RESULTS*

ALCRM calculates the usage of the crossing to be 164 pedestrians and cyclists per day.

***Notes on daily, annual, seasonal usage:***

From 10th March 2022 a 14 day continuous camera census was commissioned at Teynham West by RSK. The results can be seen in the table below.

Although an average use of 164 users per day has been used for this census it can be seen that on Saturday 19th 300 people were seen to use the crossing. This is almost double the average use. There were also 220 users on Sunday 20th, suggesting the crossing is used more at the weekends.

As mentioned previously, there is a high number of vulnerable users seen, including a high use by children and youths attending The Creed outdoor learning centre, some elderly, mobility impaired and encumbered users and dog walkers.

Users are categorised as vulnerable when they are likely to take an extended time to traverse due to disability or distraction, e.g. elderly, encumbered or mobility impaired, or are at higher risk due to their perception of risk e.g. children.

Dogs walked on a lead are ostensibly under control; but observed examples show the user will often be distracted, focusing on the dog and not adequately focussing on traversing – and is also an encumbered user; for example, where the dog may itself become distracted, pull or attempt to stray, when approached by other users coming in the opposite direction (especially passing other dog walkers) or by any other event. This in turn causes distraction to the user from properly watching out and listening for approaching trains, etc.

Out of the 2266 users over the 14 day period, 363 users were children, 695 dog walkers, 14 elderly, 30 mobility impaired, 12 encumbered users, 39 were pushing a bike and 10 pushing a pram.

In line with Network Rail guidance under LCG02 Census Good Practice section 5, a 50% traverse increase is applied to the traverse time to enable vulnerable users the required time to traverse the crossing and reach a place of safety before the train arrives at the crossing.

Over the 14 days, 1049 users were travelling northbound and 1234 were travelling southbound over the crossing.

### 3.1 Overall Usage at Teynham West Footpath Level Crossing

| | | Adult | Accompanied Child | Unaccompanied Child | Dog Walker (Dog on a lead) | Dog Walker (Dog off lead) | Elderly | Mobility Impaired | Encumbered User | Cyclist pushing bike | Wheelchair | Pushchair/ Pram | Mobility Scooter | Railway Personnel | Total | Total - Railway Personnel |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Thursday | 10/03/2022 | 79 | 8 | 25 | 48 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 2 | 165 | 163 |
| Friday | 11/03/2022 | 65 | 1 | 6 | 30 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 105 | 105 |
| Saturday | 12/03/2022 | 64 | 8 | 2 | 52 | 1 | 1 | 2 | 0 | 1 | 0 | 1 | 0 | 2 | 134 | 132 |
| Sunday | 13/03/2022 | 75 | 12 | 2 | 51 | 2 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 146 | 146 |
| Monday | 14/03/2022 | 64 | 2 | 18 | 53 | 1 | 0 | 3 | 0 | 2 | 0 | 3 | 0 | 2 | 148 | 146 |
| Tuesday | 15/03/2022 | 71 | 8 | 6 | 40 | 0 | 2 | 1 | 2 | 2 | 0 | 1 | 0 | 0 | 133 | 133 |
| Wednesday | 16/03/2022 | 49 | 6 | 14 | 28 | 3 | 1 | 4 | 4 | 4 | 0 | 0 | 0 | 0 | 113 | 113 |
| Thursday | 17/03/2022 | 68 | 12 | 52 | 47 | 2 | 0 | 3 | 0 | 1 | 0 | 2 | 0 | 0 | 187 | 187 |
| Friday | 18/03/2022 | 78 | 7 | 18 | 45 | 0 | 1 | 0 | 1 | 3 | 0 | 0 | 0 | 4 | 157 | 153 |
| Saturday | 19/03/2022 | 142 | 53 | 11 | 76 | 2 | 6 | 3 | 1 | 6 | 0 | 0 | 0 | 0 | 300 | 300 |
| Sunday | 20/03/2022 | 107 | 37 | 3 | 61 | 0 | 1 | 2 | 0 | 8 | 0 | 1 | 0 | 0 | 220 | 220 |
| Monday | 21/03/2022 | 67 | 0 | 18 | 47 | 2 | 1 | 3 | 1 | 4 | 0 | 1 | 0 | 0 | 144 | 144 |
| Tuesday | 22/03/2022 | 96 | 5 | 13 | 62 | 1 | 0 | 1 | 1 | 2 | 0 | 1 | 0 | 0 | 182 | 182 |
| Wednesday | 23/03/2022 | 78 | 4 | 12 | 40 | 1 | 1 | 3 | 1 | 2 | 0 | 0 | 0 | 7 | 149 | 142 |
| Total over 14 days | | 1103 | 163 | 200 | 680 | 15 | 14 | 30 | 12 | 39 | 0 | 10 | 0 | 17 | 2283 | 2266 |
| 14 day Average | | 78.79 | 11.64 | 14.29 | 48.57 | 1.07 | 1 | 2.14 | 0.86 | 2.79 | 0 | 0.71 | 0 | 1.21 | 163.07 | 161.86 |
| Weekday Average | | 71.5 | 5.3 | 18.2 | 44 | 1 | 0.6 | 2.1 | 1.1 | 2.2 | 0 | 0.8 | 0 | 1.5 | 148.3 | 146.8 |
| Weekend Average | | 97 | 27.5 | 4.5 | 60 | 1.25 | 2 | 2.25 | 0.25 | 4.25 | 0 | 0.5 | 0 | 0.5 | 200 | 199.5 |

**Figure 3-1.1 – Usage Data Recorded During the Fourteen-day Census**

## 3. RISK OF USE

### *3.1 SIGHTING AND TRAVERSE*

At Teynham West level crossing, the decision point and traverse lengths are calculated as:

| | Decision point (m) | Traverse length (m) | Measured from |
|---|---|---|---|
| Up side | 2 | 9 | On the deck level with upside signal |
| Down side | 2 | 9 | Level with small railway building |

Timber decking is provided over the level crossing.

The decking is considered to be wide enough for all users of the crossing. It is fitted with a non-slip surface.

The traverse times are calculated as:

| | Traverse time (s) |
|---|---|
| Pedestrians | 12 |

**Assessor's traverse time notes:**

The traverse is calculated using an accepted standard of 1.189m/s for able bodied users. As mentioned above there is a high amount of vulnerable users at the crossing so 50% has been added to the traverse time to account for these users, this is to enable them the time needed to traverse the crossing and reach a position of safety before a train arrives at the crossing. This is in line with Network Rail guidance under LCG02 Census Good Practice section 5.
An additional 1 second has also been added to account for step ups on the decking both sides of the crossing.

Sighting, measured in metres at a line speed of 80mph for the up line (including the current TSR) and 75mph for the down line, at Teynham West level crossing is recorded as:

Required sighting at full 90mph line speed on the up is shown in red

| | Up side looking at trains travelling in the up direction | | Up side looking at trains travelling in the down direction | | Down side looking at trains travelling in the up direction | | Down side looking at trains travelling in the down direction | |
|---|---|---|---|---|---|---|---|---|
| Line 1: Line 1 | Minimum required sighting distance | Actual sighting distance | Minimum required sighting distance | Actual sighting distance | Minimum required sighting distance | Actual sighting distance | Minimum required sighting distance | Actual sighting distance |
| | 429/483 | 440 | 402 | 861 | 429/483 | 463 | 402 | 466 |
| | Sighting distance measured to point | | Sighting distance measured to point | | Sighting distance measured to point | | Sighting distance measured to point | |
| | Teynham station platform | | Lineside equipment | | Footbridge | | Frognal Farm Crossing | |
| Line 2: Line 2 | Minimum required sighting distance | Actual sighting distance | Minimum required sighting distance | Actual sighting distance | Minimum required sighting distance | Actual sighting distance | Minimum required sighting distance | Actual sighting distance |
| | 429/483 | 464 | 402 | 854 | 429/483 | 464 | 402 | 432 |
| | Sighting distance measured to point | | Sighting distance measured to point | | Sighting distance measured to point | | Sighting distance measured to point | |
| | Foot bridge | | Lineside equipment | | Footbridge | | fencing | |

| | If sighting is deficient, is it mitigated? | Notes on deficient sighting |
|---|---|---|
| Up side looking at trains travelling in the up direction | Yes, sighting deficiency mitigated | Whistle Board and TSR |
| Up side looking at trains travelling in the down direction | N/A | N/A |
| Down side looking at trains travelling in the up direction | N/A | N/A |
| Down side looking at trains travelling in the down direction | | N/A |

Sighting restrictions are recorded as follows:

| | Up Direction | Down Direction |
|---|---|---|
| Nothing; vanishing point | No | No |
| Track curvature | Yes | Yes |
| Permanent structure (building/wall etc) | No | Yes |
| Signage or crossing equipment | No | No |
| Vegetation | No | No |
| Bad weather on the day of visit | No | No |
| Other | No | No |

There are known obstructions that could make it difficult for users to see approaching trains. There are no known issues with foliage, fog or other issues that might impair visibility of the crossing, crossing equipment or approaching trains.

Actions to improve sighting have not been identified.

***Assessor's improving sighting and decision point notes***

During the CCTV census in 2019 it was found that the crossing had a high number of vulnerable users and the 50% increase for traverse time was applied. At 90mph a minimum sighting distance of 483m is required for users to see an approaching train, as shown in the sighting table this cannot be achieved. When accounting vulnerable users only 440m of sighting is achieved when on the upside looking for up direction trains.

Before implementing a temporary speed restriction (TSR) Network Rail considered the following immediate short term actions to bring the crossing into compliance:

- Improving sighting –Teynham station is a fully operational station, as such station furniture, commuters on the platforms, trains stopped in the station and any other railway furniture is unable to be moved or removed, therefore it was unachievable to improve the sighting.
- Implementing Miniature stop lights – This is not an immediate short term action and is detailed below in section 5.2.
- Closing the crossing – temporarily closing the crossing may adversely affect full legal closure by generating objections from the local public. Network Rail want to engage with the public and work with the council to achieve legal closure.
- Improving whistle board warning – At 90mph the whistle boards in their current position do not give the required warning time to users at the crossing. to give effective warning of approaching trains, whistle boards should be positioned no further than 400m from the crossing. At the line speed of 90mph, to ensure sufficient warning time, they would need to be moved beyond that maximum distance where their efficiency can no longer be achieved. Consequently, as the most appropriate short-term intervention, whistle boards could not be deployed on their own and to ensure their compliance and efficacy, would need to be combined with a temporary speed restriction (pending deployment of a permanent solution).

As the above immediate actions did not reduce the risk or were unachievable a temporary speed restriction on the up line of 80mph from 90mph was implemented.

***Assessor's general traverse notes:***

| |
|---|
| The traverse is calculated at a walking speed of 1.189m/s with 1 second added for the step ups and a 50% increase for vulnerable users. |

***Assessor's general sighting notes:***

| |
|---|
| 53 out of the 183 trains stop at Teynham station, this mix of stopping and non-stopping services makes it harder for a user to judge the speed of an approaching train as they will either be slowing down for the station or accelerating as they are leaving the station. They are also unlikely to know if the approaching train will stop at the station and so the train may be doing full line speed.<br>Sighting is reduced further when there is a train stood in the platform, obscuring sighting of any approaching trains on the opposite line.<br><br>There is a brick railway building on the down side at the London side of the crossing, that if a user were to take a quick glance could obscure sighting, there are whistle boards in place to help mitigate this. Sighting can also be obscured by some of the station and platform furniture, including the platform end gates. Any commuters standing on the platform can also obscure sighting of approaching trains or become a distraction for anyone using the crossing. |

## *3.2 EVALUATION OF MITIGATIONS*

Teynham West level crossing is provided with whistle boards.

| | Line speed | Whistle board distance (m) | Whistle board warning time (s) | Is the train horn clearly audible at the crossing? | Is the whistle board warning effective? | Comments on audibility and whistle board position |
|---|---|---|---|---|---|---|
| Up line | 80 | 400 | 11.93 | Yes | Yes, effective | See below |
| Down line | 75 | 395 | 11.78 | Yes | Yes, effective | See below |

The percentage of users who use the crossing during the night-time quiet period, between midnight and 06:00, is estimated as 2%.

*Assessor's notes on whistle boards:*

| |
|---|
| The upside whistle board is placed on the other side of the station and Teynham East crossing.<br><br>If used correctly, the whistle boards are a suitable risk measure for warning users of an approaching train, however during the night time quiet period (00:00-06:00) trains do not blow their horns, therefore there is no warning of approach trains during this time. |

Teynham West level crossing is not provided with warning lights.

## *3.3 CROSSING APPROACHES*

The signs at Teynham West level crossing are located on the direct route a user would take over the level crossing, they are positioned so that they are clearly visible to users taking a direct route over the level crossing. The visibility of the signs is reduced at night or at dusk.

There are known issues with ice, mud, loose material or flood water.

The approaches to the crossing within the boundary fence are not considered to be steep, slippery or present a tripping hazard to users.

There are no adjacent sources of light or noise that could affect a users' ability to see or hear approaching trains.

***Assessor's general crossing approach notes:***

Access to the crossing is via a metal kissing gates on both sides, built into the Network rail boundary, the platform entrances are within the gates on both sides.

The crossing has a good timber deck fitted with anti slip surface.

There are small step ups on the crossing deck, this is however not disincentivising to cycles, prams and wheelchairs, which increases the risk.

Anti-trespass guards are fitted on both sides of the deck.

All signage relating to footpath crossings is fitted, STOP LOOK LISTEN, ELECTRIFICATION, TRESPASS and included here is DO NOT CROSS IN FRONT OR BEHIND TRAINS STANDING IN THE PLATFORMS.

The crossing is also surrounded by palisade fencing which can obscure sighting on the Upside approach if users were to glance for approaching trains.

There is a small amount of ambient light coming from the station and nearby road but not directly at the crossing. A user may require a personal light source.

## *3.4 AT THE CROSSING – ANOTHER TRAIN COMING RISK*

Trains are known to sometimes pass each other at this crossing.

***Assessor's another train coming notes:***

There are 183 trains per day, due to close proximity to the station, with a mix of stopping and non stopping trains or following incidents, disruptions or unscheduled running, trains do pass within 20 seconds of each other.

The risk is to a pedestrian having waited for the first train to pass, then steps out into the path of the second train which they have not been able to see or hear as it has been obscured by the first train.

The risk of this is also increased by any trains stood in the platforms, obscuring sighting of any trains on the opposite line and exacerbated by any users rushing to catch their train at the station.

## *3.5 INCIDENT HISTORY*

A level crossing safety event has been known to occur at Teynham West level crossing in the last twelve months.

***Assessor's incident history notes:***

There have been the following incidents in the last twelve months:

20.11.22 – LC Near Miss – 1P30 (10:53 Ramsgate-Victoria) reported applying the emergency brake at Teynham West crossing due to 4 males crossing in front of the train. Near miss confirmed
15.02.22 - LC Near Miss - 1F37 1220 Ramsgate – St. Pancras reported a near miss at Teynham West footpath crossing
04.04.22 – LC Near Miss 1F53, 1620 Ramsgate – St Pancras International reported a near miss at Teynham West Foot Crossing.

(it should be noted that the above near miss events took place with the temporary line speed of 80mph in place.)

28.04.22 - "Kid" reported sitting against fence within boundary as 1F58 went past at Teynham West footpath crossing.
08.04.21 - 1F51 16.30 Faversham to St Pancras reported a LC misuse with a bike rider at Teynham West - NOT a near miss.

Previous to this there have been the following incidents:

23.08.20 – Children playing on the crossing.
29.08.20 – Near Miss with a man on a push bike.
20.04.18 – Near miss with a MOP
20.03.18 – Near miss with a person
07.11.17 – Female with dog walked in front of train
25.10.17 – Male pushing a pram walked in front of train
30.08.17- Youths misusing the crossing
25.06.17- Emergency brake applied for children playing chicken
25.06.17- Youths playing chicken
17.06.17- Two youths ran across in front of train
13.04.17-Person crossed in front of train
05.04.17 – A boy and a girl were dodging trains

During the 9 day camera census unwanted behaviours and misuse events were captured that had not been reported as they were not seen by train drivers or railway staff, this included:

- Accompanied children loitering and sitting on the tracks
- Cyclists riding over the crossing
- Children running across the tracks
- Children walking over the trespass guards
- An adult and child pushing a trolly over the crossing
- Unaccompanied children playing football on the crossing

Some can be seen in the images below:


Figure 3-3.2 – Unaccompanied Children Playing with a Football on the Tracks


Figure 3-3.3 – Cyclists Riding Across the Level Crossing


Figure 3-3.5 – Accompanied Child Sits on the Railway

***Teynham West level crossing ALCRM results.***

Key risk drivers: ALCRM calculates that the following key risk drivers influence the risk at this crossing:

- Distracted / forced by dog (loss of control)
- Tries to cross in front of train
- Second train coming
- Does not stop look listen
- Slips, trips, falls or snagged on crossing
- Unaware of crossing
- Railway cause: insufficient sighting

| **The calculated safety risk for this crossing is:** | **Risk per Traverse (Letter)** | **Collective Risk (Number)** |
|---|---|---|
| | **B** | **2** |
| | **Risk per Traverse (FWI)** | **Collective Risk (FWI)** |
| **Cars / car-based vans / quad bikes** | 0 | 0 |
| **Large vans / small lorries / large 4x4s** | | 0 |
| **Buses / Coaches** | 0 | 0 |
| **HGVs** | | 0 |
| **Tractors / large farm vehicles** | | 0 |
| **Pedal / motor cyclists** | 0.000000425 | 0 |
| **Pedestrians** | | 0.025421046 |
| **Horse Riders** | | 0 |
| **Animal Herders** | | 0 |
| **Vehicles user in pedestrian mode** | | 0 |
| **Train Passengers** | 0 | 0 |
| **Train Staff** | 0.000000002 | 0.000162331 |
| **Derailment Risk** | | 0 |
| **Weighted Average (Users)** | **0.000000388** | |
| **Total Risk** | | **0.025583378** |
| | **Average Consequence** | 0.788 |
| | **Collision Frequency** | 0.032466215 |

## 5. OPTION ASSESSMENT AND CONCLUSIONS

### *5.1 OPTIONS EVALUATED*

The options evaluated to mitigate the risks at Teynham West crossing include:

| Option | Term | Risk per Traverse | Collective Risk | FWI | FWI Difference | Cost | Benefit Cost Ratio | Status | Comments |
|---|---|---|---|---|---|---|---|---|---|
| Closure via diversion | Long Term | M | 13 | 0 | -0.025583378 | 50,000 | 21.88 | COMPLETE | See section 5.2 |
| Closure via stepped footbridge | Long Term | M | 13 | 0 | -0.025583378 | 1,100,000 | 0.99 | COMPLETE | See section 5.2 |
| Closure via ramped footbridge | Long Term | M | 13 | 0 | -0.025583378 | 2,200,000 | 0.50 | COMPLETE | See section 5.2 |
| Installation of OMSL | Long Term | C | 2 | 0.011610315 | -0.013973063 | 150,000 | 2.00 | COMPLETE | See section 5.2 |
| Installation of Integrated MSL | Long Term | C | 2 | 0.011610315 | -0.013973063 | 800,000 | 0.40 | COMPLETE | See section 5.2 |
| Yellow deck and demarcation | Short Term | B | 2 | 0.025074957 | -0.000508421 | 5,000 | 0.32 | COMPLETE | See section 5.2 |
| Remove step ups | Short Term | B | 2 | 0.025583378 | 0 | 5,000 | 0.00 | COMPLETE | See section 5.2 |

NOTES

Network Rail always evaluates the need for short and long-term risk control solutions. An example of level crossing risk management might be a short-term risk control of a temporary speed restriction, with the long-term solution being closure of the level crossing and its replacement with a bridge.

## *5.2 CONCLUSIONS*

Assessor's notes:

Teynham West Footpath crossing is located on footpath number ZR681 in Teynham, Kent at the west end of Teynham Station, half a mile from Teynham centre and 4 miles from Sittingbourne. Teynham is a large village situated between Faversham and Sittingbourne and has a population of around 2,900. On the up (south) side the footpath leads from Lower Road and gives access to platform one of Teynham station before the crossing. The area on the North (Down) side of the crossing is rural and is popular with walkers and dog walkers who use a circular walk coming out on Station Row and over Teynham East CCTV crossing. Platform 2 of Teynham station can also be accessed from north side of the footpath. The village and housing estates are on the South (Up) side of the crossing, including Teynham Village Hall and Teynham Parochial CE Primary School.

The crossing is adjacent to Teynham Station and both platforms can be accessed from the footpath, because of this the crossing has peak use at both ends of the day. The platforms can also be accessed from the station entrance at the east of the platforms as well as Teyham East CCTV crossing, where there is also a footbridge.

There have been houses built on the south side of Teynham Station, but this has not been seen to have a big impact on the crossing. There is a local plan to develop areas on the South side of the crossing around Frognal Lane, this is likely to create increased use over the crossing as this will be the most convenient use for the station.

Current Risk

Teynham West is ranked 2nd out of 361 for Level crossing risk in Kent and 2nd out of 169 for footpath crossing risk in Kent.

The risk score changed significantly from one assessment to another from a C3 to a B2.

Risk Reduction

**Closure via diversion**

Closure can be achieved by diversion over the railway at Teynham East level crossing, where both platforms for the station can also be accessed. Teynham East CCTV crossing is a fully protected full barrier crossing, with road traffic lights and audible alarms, there is also an adjacent footbridge that can be used when the barriers are down. This type of system offers the highest form of protection and mitigation available to level crossings for users.
Some walkers and dog walkers already use a circular walk from the foot crossing that passes in front of the sewage works, to Station row and back over Teynham East crossing. A number of divert options have been explored which can be seen in the maps below.
Network Rails preferred option would be option 3, to create a new path along the back of platform 2 (North side) to meet Station Row and Teynham East crossing as this option will create a new footpath which will be more appropriate and accessible than the other footpaths available.

Option 1

Option 2

Option 3

**Closure via footbridge**

Closure could also be achieved via a stepped or ramped footbridge, however this would be a high cost option in comparison to the divert available and would be subject to planning permission and land constraints. A bridge would also overlook the rail side neighbours which has to be considered. A ramped structure is very large and is also likely to need land purchase.

**Overlay Miniature Stop Lights - £150,000**

OMSL's display a red and green light at the crossing as well an audible alarm, informing users when a train is approaching. OMSL are not suitable for non-complex locations e.g. plain line railway where there are no stations, signals or junctions. Teynham West is adjacent to Teynham station, with integrated signalling infrastructure in situ and immediately approximate to the crossing, this means that OMSLs are not a suitable at tis location.

**Integrated Miniature Stop Lights- £800,000**

Integrated MSLs also display a red and green light at the crossing as well as an audible alarm. Due to the complexity of the area and Teynham station, this system would need to be integrated into the signalling system which is of higher costs. Integrated MSLs would however not reduce the risk to an acceptable level, especially taking into account the behaviours seen at the crossing, in fact it could exacerbate some such as playing 'chicken' with the red light or vandalism, as well as the relatively high cost of installation.

**Demarcation - £5,000**

For the short term, Demarcation, yellow decking and cats eyes on the decking may provide an aid for users crossing in dark hours. However, there were previously Cats Eyes on the decking and these were broken off, they may attract unwanted attention again by users stopping to get them off. This is not a long term option as shown in the table above it has a very minimal risk reduction does not mitigate against the risk seen at this crossing.

**Remove step ups - £5,000**

In the short time removing step ups will reduce the traverse time by 1 second, this would not negate the need for the speed restriction as sighting would still be insufficient but would reduce the changes of a tripping hazard. This is not a long-term solution as it does not reduce the risk to an acceptable level and does not mitigate against the risks at the crossing

**Reducing the line speed further**

Network Rail is under obligation to run an efficient network, which means that it must manage the infrastructure to ensure that it operates at, or as near as, capacity as achievable. This in turn translates into a clear obligation to allow uninterrupted passage of trains at (or as near as achievable) line speed to accommodate the very tight timetable.

Consequently, Network Rail only introduces speed restrictions in exceptional circumstances, in emergencies and on strictly temporary basis where no other option is readily available. Introduction of speed restrictions is accordingly subject to a strict process, involving close liaison with train operators and regulator and carries a sanction to Network Rail – the liability to compensate the train operator for the resulting delay minutes, from the public purse. As this section of railway is already very busy and operates to a tight time schedule for passengers, even the current speed restriction means Network Rail are already liable for significant compensation. To reduce the line speed would exacerbate this, already adverse state of matters, further.

Added to this, the current restriction is a strictly temporary measure pending deployment of a permanent solution. It is not an appropriate risk mitigation measure in its own right not only because it is completely at odds with Network Rail's regulatory and contractual obligations, further, it does (nor is it capable of) not reduce the risk to an ALARP level. To compound this further, it does not mitigate against the behaviours seen at this crossing as mentioned above in section 3.5 and therefore does not reduce the risk to an acceptable level.

Recommendation

Taking into consideration all of the above options available for Teynham West crossing, as well as the risks associated with the crossing- high use by vulnerable users, misuse and unwanted behaviours, the close proximity to the station and a high number of trains, It is recommended that Network Rail look to take forward closure via a diversion over Teynham East CCTV crossing.

## ANNEX A – ADDITIONAL PHOTOGRAPHS

| Additional Photographs |
| --- |
|  <br>Up side approach to crossing and platform within gate |
|  <br>Up side across crossing |

Up side up direction train approach

Up side down direction train approach

Down side approach from platform entrance

Down side across crossing

Down side up direction train approach

Down side down direction train approach

## ANNEX B – HAZARD IDENTIFICATION AND RISK CONTROLS

The table below is intended for use by risk assessors when identifying hazards and risk control solutions. It is not an exhaustive list or presented in a hierarchical order.

| | Hazard | Control |
|---|---|---|
| **Road vehicle and train collision risk** | Examples at the crossing include:<br>• insufficient sighting and / or train warning for all vehicle types; known to be exacerbated by the driving position, e.g. tractor<br>• level crossing equipment and signage is not conspicuous or optimally positioned<br>• instructions for safe use might be misunderstood e.g. signage clutter detracts from key messages, conflicting information given<br>• high volume of unfamiliar users, e.g. irregular visitors, migrant workers<br>• known user complacency leading to high levels of indiscipline, e.g. failure to use telephone, gates left open<br>• type of vehicle unsuitable for crossing;<br>- large, low, slow making access or egress difficult and / or vehicle is too heavy for crossing surface<br>- risk of grounding and / or the severity of the gradient adversely affects ability to traverse<br>• poor decking panel alignment / position on skewed crossing<br>• where telephones are provided, users experience a long waiting time due to: | Controls can include:<br>• optimising the position of equipment and / or signs<br>• removing redundant and / conflicting signs<br>• engaging with signalling engineers to optimise strike in times<br>• upgrading of asset to a higher form of protection<br>• downgrading of crossing by removing vehicle access rights<br>• optimising sighting lines and / or providing enhanced user-based warning system, e.g. MSL<br>• re-profiling of crossing surface<br>• engaging with stakeholders / authorised users to reinforce safe crossing protocol, legal responsibilities and promote collaborative working<br>• widening access gates and / or improving the crossing surface construction material<br>• realigning or installing additional decking panels to accommodate all vehicle types<br>• implementing train speed restriction or providing crossing attendant |

| | Hazard | Control |
|---|---|---|
| | - long signal section (Signaller unaware of exact train location)<br>- high train frequency<br>• insufficient or excessive strike in times at MSL crossings<br>• high chance of a second train coming<br>• high line speed and / or high frequency of trains<br>• unsuitable crossing type for location, train service, line speed and vehicle types | |
| **Pedestrian and train collision risk** | Examples include:<br>• insufficient sighting and / or train warning<br>• ineffective whistle boards; warning inaudible, insufficient warning time provided, known high usage between 23:00 and 07:00<br>• high chance of a second train coming<br>• high line speed and / or high frequency of trains<br>• level crossing equipment and signage is not conspicuous or optimally positioned<br>• location and position of level crossing gates mean that users have their backs to approaching trains when they access the level crossing, i.e. users are initially unsighted to trains approaching from their side of the crossing<br>• instructions for safe use might be misunderstood e.g. signage clutter detracts from key messages, conflicting information given<br>• surface condition or lack of decking contribute to slip trip risk | Controls can include:<br>• optimising the position of equipment and / or signs<br>• removing redundant and / conflicting signs<br>• upgrading of asset to a higher form of protection<br>• optimising sighting lines, e.g. de-vegetation programme, repositioning of equipment or removal of redundant railway assets<br>• implementing train speed restriction or providing crossing attendant<br>• providing enhanced user-based warning system, e.g. MSL<br>• engaging with stakeholders / authorised users to reinforce safe crossing protocol, legal responsibilities and promote collaborative working<br>• installing guide fencing and / or handrails to encourage users to look for approaching trains, read signage or cross at the designed decision point |

| | Hazard | Control |
|---|---|---|
| | • known high level of use during darkness<br>• increased likelihood of misuse, e.g. crossing is at station<br>• free wicket gates might result in user error<br>• high volume of unfamiliar users, e.g. irregular visitors / ramblers, equestrians<br>• complacency leading to high levels of indiscipline, e.g. users are known to rely on knowledge of timetable<br>• high level of use by vulnerable people<br>• where telephones are provided i.e. bridleways, users experience a long waiting time due to:<br>  - long signal section (Signaller unaware of exact train location)<br>  - high train frequency<br>• insufficient or excessive strike in times at MSL crossings<br>• unsuitable crossing type for location, train service, line speed and user groups<br>• high usage by cyclists<br>• degree of skew over crossing increases traverse time and users' exposure to trains<br>• crossing layout encourages users not to cross at the designed decision point; egress route unclear especially during darkness<br>schools, local amenities or other attractions are known to contribute towards user error | • re-design of crossing approach so that users arrive at the crossing as close to a 90° angle as possible<br>• installing lighting sources<br>• engaging with signalling engineers to optimise strike in times<br>• providing decking or improving crossing surface, e.g. holdfast, strail, non-slip surface<br>• providing cyclist dismount signs and / or chicanes<br>• straightening of crossing deck |

| | Hazard | Control |
|---|---|---|
| **Pedestrian and road vehicle collision risk** | Examples include:<br>• a single gate is provided for pedestrian and vehicle users where there is a high likelihood that both user groups will traverse at the same time<br>• the position of pedestrian gate forces / encourages pedestrian users to traverse diagonally across the roadway<br>• road / footpath inadequately separated; footpath not clearly defined<br>• condition of footpath surface increases the likelihood of users slipping / tripping into the path of vehicles | Controls can include:<br>• providing separate pedestrian gates<br>• clearly defining the footpath; renew markings<br>• positioning pedestrian gates on the same side of the crossing<br>• improving footpath crossing surface so it is devoid of potholes, excessive flangeway gaps and is evenly laid<br>• improving crossing surface, e.g. holdfast, strail, non-slip surface |
| **Personal injury** | Examples include:<br>• skewed crossing with large flangeway gaps results in cyclist, mobility scooter, pushchair or wheelchair user being unseated<br>• condition of footpath surface increases the likelihood of users slipping / tripping<br>• degraded gate mechanism or level crossing equipment<br>• barrier mechanism unguarded / inadequately protected | Controls can include:<br>• improving fence lines<br>• reducing flangeway gaps and straightening where possible<br>• providing decking or improving crossing surface, e.g. holdfast, strail, non-slip surface<br>• straighten / realign gate posts<br>• fully guarding barrier mechanisms |

## ANNEX C – ALCRM RISK SCORE EXPLANATION

ALCRM calculates the level of risk to individual users (per traverse) and the combined risks for all users, train staff and passengers at level crossings. It provides a consistent and robust quantitative methodology that is supplemented by the local knowledge and professional judgement of risk assessors.

Risk is expressed in fatalities and weighted injuries (FWI). The following values help to explain what this means:

- 1 = 1 fatality per year or 10 major injuries or 200 minor RIDDOR events or 1000 minor non-RIDDOR events
- 0.1 = 20 minor RIDDOR events or 100 minor non-RIDDOR events
- 0.005 = 5 minor non-RIDDOR events

### RISK PER TRAVERSE

This is the level of calculated risk to an individual crossing user. It applies to a single traverse of the level crossing or each time the crossing is used by an individual.

Risk per traverse:

- Can be calculated for crossing users, train staff and passengers. Ranking is based on the risk to users only.
- Does not increase with the number of users.
- Is presented as a simplified ranking A to M. A is highest, L is lowest, and M is 'zero risk' e.g. temporary closed, dormant or crossings on mothballed lines.
- Allows risks to individuals on a per traverse basis to be assessed even if usage and Collective Risk is low.
- Can help in the prioritisation of risk mitigation and investment in safety.

| Risk Per Traverse Ranking | Probability | | FWI/traverse | |
|---|---|---|---|---|
| | Upper | Lower | Upper | Lower |
| A | 1 in 1 | 1 in 500000 | 1 | 0.000002 |
| B | 1 in 500000 | 1 in 2500000 | 0.000002 | 0.0000004 |
| C | 1 in 2500000 | 1 in 12500000 | 0.0000004 | 0.00000008 |
| D | 1 in 12500000 | 1 in 62500000 | 0.00000008 | 0.000000016 |
| E | 1 in 62500000 | 1 in 125000000 | 0.000000016 | 0.000000008 |
| F | 1 in 125000000 | 1 in 250000000 | 0.000000008 | 0.000000004 |
| G | 1 in 250000000 | 1 in 500000000 | 0.000000004 | 0.000000002 |
| H | 1 in 500000000 | 1 in 1000000000 | 0.000000002 | 0.000000001 |
| I | 1 in 1000000000 | 1 in 2000000000 | 0.000000001 | 0.0000000005 |
| J | 1 in 2000000000 | 1 in 5000000000 | 0.0000000005 | 0.0000000002 |
| K | 1 in 5000000000 | 1 in 10000000000 | 0.0000000002 | 0.0000000001 |
| L | 1 in 10000000000 | Greater than 0 | 0.0000000001 | Greater than 0 |
| M | 0 | 0 | 0 | 0 |

## COLLECTIVE RISK

This is the total calculated risk for the crossing and includes the risk to users (pedestrian and vehicle), train staff and passengers.

Collective risk:

- Is presented as a simplified ranking 1 to 13. 1 is highest, 12 is lowest, and 13 is 'zero risk' e.g. temporary closed, dormant or crossings on mothballed lines.
- Can help in the prioritisation of risk mitigation and investment in safety.

| Collective Risk Ranking | Upper Value (FWI) | Lower Value (FW) |
|---|---|---|
| 1 | Theoretically infinite | Greater than 5.00E-02 |
| 2 | 0.050000000 | 0.010000000 |
| 3 | 0.010000000 | 0.005000000 |
| 4 | 0.005000000 | 0.001000000 |
| 5 | 0.001000000 | 0.000500000 |
| 6 | 0.000500000 | 0.000100000 |
| 7 | 0.000100000 | 0.000050000 |
| 8 | 0.000050000 | 0.000010000 |
| 9 | 0.000010000 | 0.000005000 |
| 10 | 0.000005000 | 0.000001000 |
| 11 | 0.000001000 | 0.000000500 |
| 12 | 0.0000005 | 0 |
| 13 | 0.00E+00 | 0.00E+00 |

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# Public Rights of Way

# Level Crossings on the Rail Network

## Memorandum of Understanding between Network Rail, ADEPT, LGA & IPROW.

## Introduction

This Memorandum of Understanding has been developed by a working group of representatives from Network Rail (who deal with Level Crossings), the Association of Directors of Environment, Economy, Planning & Transport - Rights of Way Managers' Group (ADEPT), the Institute of Public Rights of Way and Access Management (IPROW) and the Local Government Association (LGA). The aim is to improve working practices between Network Rail and Local Highway Authorities (LHAs) where Public Rights of Way (PRoW) use level crossings on the rail network in England and Wales.

It is not intended for this Memorandum of Understanding to be legally binding. This document contains high level principles aimed at encouraging clearer communication and building collaborative relationships between Network Rail and LHAs. This will encourage the most effective dialogue when changes are proposed to a level crossing which affects a PRoW.

This is an important step towards working together to ensure that users remain safe when using the PRoW network in England and Wales.

This Memorandum of Understanding may evolve over time as the working relationship between Network Rail, ADEPT and IPRoW develops. It does not detail any agreed processes; these will be set out in future documentation.

## Scope of the Document

This document covers all of the interactions that Network Rail has when dealing with Public Rights of Way and Level Crossings and includes temporary works (including emergency closures) as well as longer term proposals such as bridge works, permanent closures, diversions and downgrades.

This document will evolve to reflect the work that is currently proposed. A work program will continue between ADEPT / IPRoW / LGA / Network Rail to identify examples of best practice, where there are areas for improvement and to encourage greater understanding of processes, which will be reflected in the following outputs: -

1. Where PRoW level crossings are affected, Network Rail will integrate PRoW legislation and processes alongside its project management tool (GRIP). This includes an ongoing dialogue about the processes used for the closure or diversion of PRoW and how the GRIP tool can be best adapted to take into account of the various factors, including timescales.
2. The production of further documents may be appropriate to encourage best practice when dealing with emergency or temporary closures.
3. IPRoW and ADEPT will use best endeavours to promote best practice and consistency amongst LHAs.

# Memorandum of Understanding (MoU)

## 1. MoU Objectives

1.1 To promote safety at level crossings

1.2 To ensure effective communications and working partnerships between Network Rail and LHAs

1.3 To encourage a consistent approach to managing PRoW level crossings.

## 2. Principles

2.1 Network Rail is a safety critical organisation and keeping people safe on the railway is at the heart of everything it does.

2.2 LHAs duties are to assert and protect the rights of the public to use and enjoy the PRoW network.

2.3 The over-riding objective of this MoU is to acknowledge and bring each other's varying duties, responsibilities and interests together, where sometimes they can be seen to be in conflict, and try to resolve that conflict.

## 3. Communication between Network Rail and LHAs

3.1 Network Rail and LHAs will examine the best course of action given the constraints available when examining options for the future of any level crossing and will discuss as appropriate. Network Rail and LHAs will work together, acknowledging that each has different areas of expertise. Network Rail has the experience and understanding of the interface between railway operations and level crossing safety. LHAs are better placed to understand the impact of the crossing on the wider PRoW network.

3.2 Network Rail recognises the knowledge and expertise of LHAs regarding the PRoW network and will consult with the LHA at the earliest appropriate opportunity. Network Rail retains the discretion to decide how it ultimately approaches level crossings.

3.3 A range of meetings are available to discuss PRoW issues, such as the Network Rail Level Crossing Strategy Group, Road-Rail Partnership Group meetings, ADEPT regional meetings and local level public consultations, and involvement with these is encouraged.

3.4 Network Rail and LHAs will continue to work together to identify the best methods of communication to promote continuous improvement.

3.5 LHAs will inform Network Rail of any issues that arise in addressing an application submitted by Network Rail, including any further information required, as soon as is reasonably practicable.

3.6 Network Rail will investigate any perceived concerns brought to its attention and attempt to address them to the best of its ability.

3.7 ADEPT and IPRoW will encourage PRoW staff and managers improve understanding of level crossing processes and to form working relationships with local Level Crossing Managers / Liability Negotiation Advisers within Network Rail.

3.8 Network Rail will seek to broaden the understanding of those in the Rights of Way profession, in relation to the current means of risk assessing Level Crossings.

3.9 ADEPT / IPRoW will seek to broaden the understanding of PRoW legislation of relevant Network Rail staff where this is required.

3.10 LHAs will expect Network Rail employees involved in schemes which affect the closure of level crossings to engage with its Liability Negotiations Team.

3.11 In line with Network Rail's responsibility for the safe operation of the railway, where it identifies that a level crossing poses an urgent safety risk to the public and requests a temporary emergency closure, the LHA will give a high priority to engaging with and responding to Network Rail.

3.12 For all other level crossing applications, the LHA will prioritise accordingly based on the evidence supplied and will explain the reasons behind any decisions taken.

## 4. Level Crossings and Public Rights of Way Changes

4.1 Where there is a need to make changes to the PRoW network, both LHAs and Network Rail agree that: -

a) The correct application forms will be used for any application. Information will be provided in a clear and concise format which meets the legal requirements for such an application.

b) Network Rail will develop its own internal checklist for improving evidence it provides in support of applications.

c) Where LHAs identify areas where further information is required, the nature and reason for the information will be communicated as early as possible. Network Rail will provide additional information, where possible, and engage with the LHA to resolve any issues that are raised.

d) Although this MoU does not apply to private rights, when dealing with private crossings or bridges, Network Rail will engage with LHAs to establish if there are pre-existing PRoW over crossings under consideration.

e) Meetings between Network Rail and the LHA Rights of Way Officer will be scheduled as appropriate and continue throughout the process as necessary, with the aim of resolving highlighted issues and monitoring progress.

4.2 It is recognised that each level crossing will have many factors that need to be considered, of which PRoW will be one aspect. There may be a number of options available and, although Network Rail will consider the views of the LHA, it is recognised that Network Rail may consider a different option as the most appropriate course of action.

4.3 Where the public are being displaced onto the local highway network, Network Rail and LHAs should properly assess the alternative proposed road routes with a full road safety audit (RSA) assessment, commissioned by the LHA and funded at Network Rail's expense.

4.4 Network Rail has responsibilities for safe railway operations and applications under sections 118A and 119A of the Highways Act 1980 are promoted by Network Rail on public safety grounds. All safety related applications should be progressed as promptly as possible by a LHA and Network Rail will assist, where practicable.

4.5 It is recognised that the statutory test applied by the LHA to make an extinguishment or diversion Order under the Highways Act 1980 is, primarily, expediency and the making of an Order is at its discretion.

4.6 If the decision of the LHA is that it will not progress an application it will inform Network Rail at the earliest opportunity, providing reasons for its decision. If the LHA does not progress the application Network Rail reserves the right to apply to the Secretary of State in accordance with s120 of the Highways Act 1980.

4.7 Network Rail will engage with LHAs on a case by case basis with a view to reaching a decision establishing responsibility for the maintenance of highway surfaces on structures that replace level crossings (as appropriate to the legislation).

4.8 Where Network Rail is considering the use of Transport and Works Act powers it will inform the LHA(s) of this as soon as possible along with the reasons for this decision.

## 5. Pre-Application Consultation

5.1 Network Rail is conscious of ensuring that the public has the opportunity to input into the proposals it makes for changes to level crossings and PRoW, and will carry out pre-feasibility consultation work wherever possible. This can include consultation with stakeholders, discussions with the LHA, obtaining permission and public meetings, etc.

## 6. Confidentiality

6.1 Network Rail may ask any LHA in an individual case to keep some information regarding changes to crossings confidential. If this is the case then Network Rail staff need to make this clear from the outset.

## 7. The Information Acts

7.1 With regard to the ongoing discussions and meetings of the Working Group all parties acknowledge that:

(a) There may be requests through the Freedom of Information Act 2000 and/or the Environmental Information Regulations 2004 (collectively, the **Information Acts**), to disclose information relating to the subject matter of this Memorandum of understanding; and

(b) Notwithstanding any other provision in this Memorandum of Understanding, Network Rail shall be responsible for determining in its absolute discretion whether any information is exempt from disclosure in accordance with the Information Acts.

7.2 ADEPT and IPRoW shall provide all necessary assistance and cooperation as reasonably requested by Network Rail to enable it to comply with its obligations under the Information Acts.

**For:**

**Network Rail Infrastructure Limited**

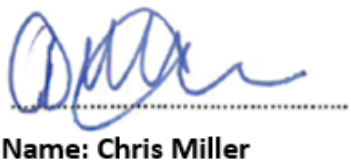
……

**Name: Andrew Haines**
**Title: Chief Executive**

**ADEPT**

Name: Mike Ashworth
Title: Chair, Transport Board

**IPRoW**



**Name: Chris Miller**
**Title: President**

# Application to divert part of public footpath ZR109 from the foot crossing known as Simpsons Crossing, at Bobbing in the Borough of Swale

A report by the Public Rights of Way and Access Service Manager to Kent County Council's Regulation Committee Member Panel on 24 November 2023.

**Recommendation: I recommend that the applicant be informed that an Order to divert part of public footpath ZR109 from the foot crossing known as Simpsons Crossing, at Bobbing in the Borough of Swale, will be made.**

Local Member: Mike Baldock Unrestricted item

## Introduction and background

1. The County Council has received an application to divert part of public footpath ZR109 where it passes over the at grade rail crossing, known as Simpsons Crossing, at Bobbing. The application to remove the at grade foot crossing from the railway line has been made by Network Rail, in the interests of safety.

2. The crossing sits behind the Bobbing Premier Inn and beside the A249. The footpath leads to the A2 south of the railway and leads to the Premier Inn, The Bobbing Apple Pub and a McDonalds, as well as to various housing estates to the north. There are two schools close by, Grove Park Primary and Westlands School. The crossing is known to be used by pupils from these schools.

3. This is the second application to divert the path. The first proposal in 2013 was to divert the path up the embankment of the A249, utilising the road bridge to cross the railway. This proposal was rejected, primarily due to the risks associated with the proximity to traffic using the A249 and objection by Highways England (now National Highways). Land close to the crossing has been and continues to be developed, which in turn led to an increase in use of the crossing.

4. Since 2013 a number of risk assessments have been undertaken by Network Rail. It is Network Rail's position that Level Crossings are risk assessed on a regular basis and when risk is known to have changed, such as if a new housing development is being built or if the train timetable changes. The risk assessment process includes quantitative as well as qualitative risk assessment. In quantifying risk, Network Rail uses a risk model called the All Level Crossings Risk Model ("ALCRM") which was developed collaboratively by the Rail Safety & Standards Board, Network Rail and others. This model provides a consistent method for assessing risk to crossing users, train passengers and rail staff. The model incorporates over 200 inputs relating to types of trains, number of trains, train speed, public usage, the crossing environment (location etc.), environmental factors (prone to fog, sun glare etc.), layout, sighting distance for approaching trains, incident history, user behaviour and the effectiveness of mitigations in place. The ALCRM reports two measures of risk: collective risk and individual risk of fatality. Collective risk includes total harm in terms of Fatalities and Weighted

Injuries (FWI) – used throughout the UK rail industry – and the individual risk to a single typical user. Coupled with this, Network Rail incorporates qualitative assessment based on the structured expert judgement of the Level Crossing Manager.

5. The most recent risk assessment carried out at this crossing was on 2 March 2020 following a near miss on 21 February 2020. The crossing scored a rating of C3 (it was C5 in 2013) on the ALCRM, which means it has a high to medium level of both individual and collective risk. At that time, the crossing was ranked as 13th out of all crossings in Kent, and 2nd highest for footpath crossings. It should be noted that where this crossing is currently closed under a Temporary Traffic Regulation Order, it comes off Network Rail's risk register. If the crossing were to be opened today (at the time of writing this report) it would be 3rd highest risk, with Teynham West being 2nd highest for footpath crossings, and 10th highest for all crossings.

6. The key risk drivers here are:
    - frequency and variety of train movements (including the high-speed passenger services);
    - high levels of use particularly of vulnerable users such as the elderly and children;
    - increased evidence of misuse.

7. Due to the risks associated with the crossing, use of the footpath has been prohibited by a Temporary Traffic Regulation Order since March 2021, initially for a period of 6 months and then extended for another two years until September 2023. A further extension of 2 years has been granted by the Department of Transport, lasting until September 2025. In this regard, Network Rail has acted in line with the nationally agreed 2019 Memorandum of Understanding ("MoU") (see **Appendix E** for a copy of the MoU), acting on the side of caution to seek the temporary closure ahead of the implementation of whatever measures are deemed appropriate to the crossing. The Public Rights of Way and Access Service and Network Rail understand the inconvenience that the closure of the crossing has had on the community and are looking to provide the best solution possible.

8. The length of public footpath ZR109 to be diverted is shown by a solid bold black line between the points A-B on the plan at **Appendix A**. The proposed new route is shown by bold black dashes between the points B-C-D-E-F-G.
   An extract from the Definitive Map can be found at **Appendix B** to show the path in context with the rest of the public rights of way network.
   The proposed route will have a width of 2.5 metres where possible.
   The existing footway along the Sheppey Way will be extended to point G.

9. A copy of the application can be found at **Appendix C** and a copy of the full Narrative Risk Assessment ("NRA") can be found at **Appendix D**.

## Policy

10. The Countryside Access Improvement Plan, Operational Management document (2013) sets out the County Council's priorities for keeping the Definitive Map and Statement up to date. The main priorities in respect of Public Path Change Orders are:

    Public Path Change Orders will normally be processed in the order in which applications are received, except in any of the following circumstances where an Order maybe processed sooner:

    - Where it will satisfy one or more of the relevant key principles set out in paragraphs 4.14 – 4.25 of the CAIP Operational Management document,
    - Where an application has been made to the County Council in its capacity as Planning Authority
    - Where the processing of an Order could save significant costs incurred in other Rights of Way functions
    - Where a Public Path Change Order is made concurrently with Orders made under Section 53 of the Wildlife and Countryside Act.

11. The County Council will take into account whether the following criteria are satisfied before promoting a Public Path Change Order. Irrespective of the following, the statutory tests (as set out within the Legal Tests section) for changing public rights of way must apply.

    I. The status of the route must not be in dispute at the time of the application, unless the Public Path Order is being implemented concurrently with an application under Section 53 of the Wildlife and Countryside Act 1981.
    II. The applicant must agree to meet the County Council's costs of promoting the Order and bringing the new path into a fit condition for public use.
    III. The applicant must also agree to defray any compensation which may become payable as a result of the proposal.
    IV. The definitive line should, where it is considered by the County Council to be reasonably practicable be open, clear and safe to use.

12. However, nothing in this policy is intended to prevent the County Council promoting a Public Path Change Order in any case where it considers it appropriate in all the circumstances to do so.

**Legal Tests – Rail Crossing Diversion or Extinguishment Order**

13. Legislation relating to the extinguishment or diversion of a public path is contained within Sections 118A (extinguishments) and 119A (diversions) of the Highways Act 1980: The Procedure is in Schedule 6 of the same Act.

    (i) The Council may make an Order to extinguish or divert a public path if it is satisfied that it is in the interests of the safety of users or likely users of at-grade crossings.

    (ii) Particular consideration has to be given to whether or not it is reasonably practicable to make the existing crossing safe for the public and what arrangements will be made to erect and maintain barriers and signs at the closed crossing.

**Government Guidance**

14. Rights of way circular (1/09) Guidance for local Authorities states:

    "*Rail crossing diversion orders (section 119A of the 1980 Act) Para 5.51.*
    *While other criteria are not specified in section 119A, the new way should be reasonably convenient to the public and authorities should have regard to the effect that the proposal will have on the land served by the existing path or way and on the land over which the new path or way is to be created. Consideration should also be given to the effect that the diverted way will have on the rights of way network as a whole and the safety of the diversion, particularly where it passes along or across a vehicular highway*."

**Consultations:**

15. Consultations have been carried out as required by the Act.

**County Member and Borough Councillors**

16. County Member Mike Baldock and Borough Councillor James Hunt were consulted. Mike Baldock did not respond to the consultation, but having been provided with an update by the case officer following the consultation deadline, he expressed concerns about the closure of the crossing as there had not been any fatalities along this stretch for a number of years. In addition, he felt the diversion proposal was of no use and requested that the case be put before Committee. Councillor Hunt did not respond to the consultation but had previously contacted Network Rail expressing concerns on behalf of local residents about the temporary closure of the crossing, including submitting a petition against the closure. In addition, Councillor Hunt indicated that from what he had been told by residents "they are happy with the proposal Network Rail have put. Whilst slightly longer than before it still allows access to where they want to get."

**Swale Borough Council**

17. Swale Borough Council's Development Manager responded that they agreed the proposal was in the interest of the safety of the public and that the diversion was not substantially less convenient to the public.

**Parish Council**

18. Bobbing Parish Council was consulted but did not respond. County Member Mike Baldock informed the case officer that the Parish Council was inquorate at the time of the informal consultation, so could not comment although there had been concerns expressed before the elections. The new Chair of Bobbing Parish Council stated that its members were divided on the matter.

**User Groups**

19. The Open Spaces Society, the Ramblers and the British Horse Society were consulted. The Open Spaces Society representative initially responded that they had no comments to make and were 'neutral'. A few days later another response was received where he expressed doubt over Network Rail's case and stated: "*Accidents are due to people taking their own lives or/and human neglect or stupid irrational behaviour*." He felt that, as the crossing was already closed, there would be no point in objecting, so would take a neutral stance.
    The Ramblers and British Horse Society did not respond.
    The Swale Footpaths Group responded after having discussed the proposal at a recent committee meeting. The Group did not object but commented that where the path would pass under the A249 bridge it should be separated from the railway line by a wall or secure fencing as is footpath ZR111 on the other side of the railway line. In addition, they expressed concern about safety where the path would connect to the Sheppey Way as there are no barriers between walkers and the traffic.

**East Kent Area Public Rights of Way Team**

20. The East Kent Area Public Rights Officer responded that he had no comments to make.

**Kent Highways**

21. Kent Highways agreed that the proposed diversion was in the interest of public safety but requested that a footway be added where the diverted path would meet the Sheppey Way.

**Statutory Undertakers**

22. No objections were received from any Statutory Undertakers who responded to the consultation.

**Local residents**

23. Although not sent directly to local residents, the proposal had been more widely circulated. 11 local residents responded with 6 in support of the proposal, 4 objecting and 1 with mixed comments. Objector 1 disagreed that the proposed diversion was in the interest of public safety as they were aware that some people were climbing the bank to the A249 and crossing by that means. They further commented that a lengthy diversion would not stop this. They considered that the proposal would be substantially less convenient to the public as it is substantially longer and would connect to the busy Sheppey Way.

24. Objector 2 disagreed that the proposed diversion was in the interest of public safety as they had witnessed children still accessing the crossing despite it being locked and that the children were in greater danger at risk of being trapped line side as a result. However, they then went on to say that if a diversion was the only option, then they would have to accept it. With regards to convenience, they stated that "any option that involves walking further is going to be an inconvenience to anyone that is lazy enough to just climb the fences or verges anyway."

25. Objector 3 considers that the alternatives that teenagers are now taking are more dangerous, that is climbing up the steep slopes and racing across the A249. They stated that the proposed diversion is "considerably longer and more inconvenient" meaning that the teenagers are still likely to use the more dangerous option.

26. Objector 4 considers that the proposed new footpath is unacceptable as people would be "*expected to walk along a footpath next to the dangerous Sheppey Way where cars speed past at 50mph, to then pass along the constantly busy garage, carpark and macdonalds under the railway bridge to link to the other side*." They believe there would be a greater risk of accidents from using the proposed route. In addition, they commented on some of the local community taking "*dangerous shortcuts by climbing a steep embankment and using this as a means to get over the bridge to the other side*."

27. The respondent who put forward mixed comments seemed to both agree and disagree that the proposed diversion was in the interest of public safety. They commented that the proposed diversion should have taken place before the closure of the crossing, and ultimately, they wanted access of some kind. They then went on to state that they disagreed as people are now crossing in an unsafe manner, "*either crossing the line directly or using the A249 slip*" both of which they felt were more dangerous than the rail crossing was. As regards convenience, they recognised that the proposal was less convenient but that the proposed diversion "*is infinitely better that the hardship we are currently suffering*" as a result of the closure.

28. The responses received indicate a division in local community opinion, which is also reflected within the Parish Council.

**The Case - the proposed diversion of part of public footpath ZR109 at Bobbing where it passes over the at grade rail crossing**

29. In dealing with the application to divert a public right of way, consideration must be given to the following criteria of Section 119A of the Highways Act 1980:

a) Whether it is in the interests of the safety of users or likely users of at grade crossings.

b) Whether it is reasonably practicable to make the crossing safe for use by the public, and what arrangements have been made for ensuring that, if the order is confirmed, any appropriate barriers and signs are erected and maintained.

c) Whether the diversion order alters a point of termination of the path or way, if that point is not on a highway over which there subsists a like right of way or, otherwise than to another point which is on the same highway, or another such highway connected with it.

d) Whether the order should make provision requiring the operator of the railway to maintain all or part of the right of way created by the order.

30. To be taken into account but not listed as criteria under Section 119A of the Act but in Rights of Way Circular (1/09):

i) Whether the right of way will be reasonably convenient to the public.

ii) The effect the proposal will have on the land served by the existing path or way and on land over which the new path or way is to be created.

iii) The effect that the diverted way will have on the rights of way network as a whole.

iv) The safety of the diversion, particularly where it passes along or across a vehicular highway.

31. Those criteria are considered individually, and conclusions drawn below:

*a) Whether it is expedient in the interests of the safety of users or likely users of the crossing.*

i) A number of risk assessments have been undertaken by Network Rail at this crossing. The most recent was on 2 March 2020 following a near miss on 21 February 2020, the result of which was to temporarily close the crossing using an Emergency Traffic Regulation Order. Due to the nature and frequency of incidents at the crossing (supported by a 9-day census that provided clear evidence of misuse and inappropriate behaviours at the crossing), Network Rail applied to temporarily close the crossing until a more permanent solution could be found. The Temporary Traffic Regulation Order has been extended until September 2025.

ii) It is Network Rail's position that Level Crossings are risk assessed on a regular basis or when risk is known to have changed, such as if a new housing development is being built or if the train timetable changes. The risk assessment process includes quantitative as well as qualitative risk assessment. In quantifying risk, Network Rail uses a risk model called the All Level Crossings Risk Model ("ALCRM") which was developed collaboratively by the Rail Safety & Standards Board, Network Rail and others. This model provides a consistent method for assessing risk to crossing users, train passengers and rail staff. The model incorporates over 200 inputs relating to types of trains, number of trains, train speed, public usage, the crossing environment (location etc.), environmental factors (prone to fog, sun glare etc.), layout, sighting distance for approaching trains, incident history, user behaviour and the effectiveness of mitigations in place. The ALCRM reports two measures of risk: collective risk and individual risk of fatality. Collective risk includes total harm in terms of Fatalities and Weighted Injuries (FWI) – used throughout the UK rail industry – and the individual risk to a single typical user. Coupled with this, Network Rail incorporates qualitative assessment based on the structured expert judgement of the Level Crossing Manager.

iii) In the most recent assessment, this crossing scored a rating of C3, which means it has a high level of both individual and collective risk. Prior to its closure, the crossing was currently ranked 13th out of all crossings in Kent, and 2nd highest for footpath crossings. The full NRA can be found at **Appendix D** to this report.

iv) The main concerns for Network Rail at this crossing are frequency and variety of train movements (including the high-speed passenger services), high levels of use particularly of vulnerable users such as elderly and children, and evidence of an increase in misuse of the crossing.

v) There are some users in the community who do not consider that the crossing is unsafe and that when used carefully and sensibly there is little or no risk. There will be people who can testify that they have used the crossing without incident for many years. However, there is an inherent risk when crossing any railway line, and at this particular crossing evidence of misuse, particularly by children, has increased, which significantly affects the level of risk. The current observed behaviour of some younger people climbing the steep embankments and racing across the A249 indicates that careful and sensible use is not always present. Therefore, for all the reasons given above, the County Council considers that, on balance, it is expedient to divert the footpath in the interests of the safety of the users or likely users of the crossing.

*b) Whether it is reasonably practicable to make the crossing safe for use by the public, and what arrangements have been made for ensuring that, if the order is confirmed, any appropriate barriers and signs are erected and maintained.*

i) Network Rail has considered various options to mitigate the risks associated with this crossing. Train warning systems such as Miniature Stop Lights, have been considered but discounted for both feasibility and effectiveness reasons. Taking into account that many of the recorded incidents have involved children and youths deliberately crossing in front of fast approaching trains, Network Rail conclude that warning systems would not prevent unsafe behaviour.

ii) Another option that was considered included the construction of a footbridge at the crossing. This was discounted as there is insufficient land available for ramped approaches. The construction of an underpass has also been discounted due to the difficulties associated with such a construction as well as environmental impact.

iii) Network Rail has not identified any other works that could be undertaken to improve safety of the crossing.

iv) The existing level crossing will be securely fenced off in order to prevent unauthorised access to the railway. Any signage required by the Council at the crossing (and any other points) will be provided.

*c) Whether the diversion order alters a point of termination of the path or way, if that point is not on a highway over which there subsists a like right of way or, otherwise than to another point which is on the same highway, or another such highway connected with it.*

i) Although the public footpath numbered ZR109 itself does not currently connect to the Sheppey Way, there is a continuous footpath connection from ZR109 to the Sheppey Way (via footpaths numbered ZR111 and ZR112). The numbering of public rights of way is an administrative process within the Public Rights of Way and Access Service, serving to identify their locations as shown on the Definitive Map. Therefore, it is considered that the new termination point for ZR109 connecting with the Sheppey Way at a different point on that highway, satisfies this test.

*d) Whether the order should make provision requiring the operator of the railway to maintain all or part of the right of way created by the order.*

*i)* The County Council will maintain the surface of the new route except where it passes alongside the railway lines under the A249 bridge. This section is to be maintained by Network Rail.

**Tests to be considered under Circular (1/09)**

32 *a) Whether the right of way will be reasonably convenient to the public.*

The existing route is approximately 14 metres in length where it crosses the railway lines. The section to be diverted is approximately 185 metres in length. Taking distances from the rail crossing to the nearby McDonalds as an example (which is a known popular destination from this footpath) it is currently 257 metres but will be 450 metres once the path is diverted. In addition, the majority of the existing route is on the level, whereas part of the proposed route will run up to the Sheppey Way on an incline through a field. However, the environment at the crossing limits where a new route might be diverted to. An earlier proposal included a zig-zagged approach up the embankment to the A249, which would have been shorter than the current proposal. However, there were various factors which meant this could not be implemented, not least an objection from National Highways (formerly Highways England) who considered the A249 too dangerous for the public to be walking beside. If the crossing remains closed (as currently under the temporary Traffic Regulation Order) the possible alternatives are even longer than the proposed diversion. Therefore, the County Council recognises that although the diversion will inconvenience some people as it is much longer than the existing route, the alternative options are particularly limited in this case.

*b) The effect the proposal will have on the land served by the existing path or way and on land over which the new path or way is to be created.*

The effect the proposal will have on land served by the existing path will be to enable Network Rail to remove the rail crossing and thereby the risk of danger to the public.

The land over which the new path is to be created is in three ownerships additional to Network Rail: Kent County Council, National Highways and A Hinge and Sons. Each affected landowner has provided written consent to the proposal. The effect of the new public right of way is to preclude the use of the land by the landowners for any purpose which is incompatible with the public's rights. This impact is acceptable to the landowners.

*c) The effect that the diverted way will have on the rights of way network as a whole.*

The diverted way will have the effect of providing continuous connection with the public rights of way network as a whole, despite it requiring a further distance to be walked.

*d) The safety of the diversion, particularly where it passes along or across a vehicular highway.*

The proposed diversion is considered to be safe for the public. The new path will be separated and secured away from the railway lines where it passes under the A249 bridge, and the footway will be extended from where the new path connects to the Sheppey Way to the existing footway.

## Further considerations

33. In addition to the tests set out in section 119A of the Highways Act 1980, the County Council must also have regard to the following issues when considering an application to divert a public right of way:

34. There is a relevant provision within the County Council's Rights of Way Improvement Plan at EN03 SAFE TRAVEL at 2.12 "Look to improve safety of railway and road crossings where possible".

35. Under section 29 of the Highways Act 1980, the County Council has a duty to have regard to the needs of agriculture (including the breeding and keeping of horses), forestry and the desirability of conserving flora, fauna and geological and physiographical features. In this case, there is no adverse effect caused by the diversion of the path.

36. Section 40 of the Natural Environment and Rural Communities Act 2006 requires that every public authority must have regard "*so far as is consistent with the proper exercise of [its] functions, to the purpose of conserving biodiversity*". In this case, there is no adverse effect caused by the diversion of the path.

37. Where the affected land forms part of an Area of Outstanding Natural Beauty (AONB), section 85 of the Countryside and Rights of Way Act 2000 requires that the County Council shall have regard to *"the purpose of conserving and enhancing the natural beauty"* of the AONB. In this case the land does not form part of the Kent Downs or High Weald AONB and as such there is no adverse effect.

38. Under section 17 of the Crime and Disorder Act 1998, the County Council has a duty to exercise its functions *"with due regard to the likely effect of the exercise of those functions on, and the need to do all that it reasonably can to prevent, crime and disorder in its area*". In this case, there is no adverse effect caused by the diversion of the path.

39. The County Council is subject to the public sector duty regarding socio-economic inequalities set out in section 1 of the Equality Act 2010. An assessment in this regard has been undertaken and although the new route will incorporate an incline through the field, there is no other adverse impact on the use of the affected path as a result of the diversion.

40. Finally, in signing the application form the applicant has agreed to defray any compensation which may become payable following a successful claim made under section 28 of the Highways Act 1980.

## Conclusion

41. In this case Network Rail has put forward a safety case to warrant a temporary Traffic Regulation Order closing the crossing until a suitable alternative can be found. Due to site limitations, it is recognised that alternative solutions are also limited. While it is understood that the new route will inconvenience some users of the path, this diversion appears to be the best proposal that can be found.

42. The County Council is therefore satisfied that the legal test of safety is met and that other considerations have been applied.

## Recommendation

43. Therefore, it is recommended that the applicant be informed that an Order to divert part of public footpath ZR109 from the foot crossing, known as Simpsons Crossing, at Bobbing in the Borough of Swale, as shown in **Appendix A** to this report, will be made on the grounds that it is expedient to divert the path on the grounds of safety of the public.

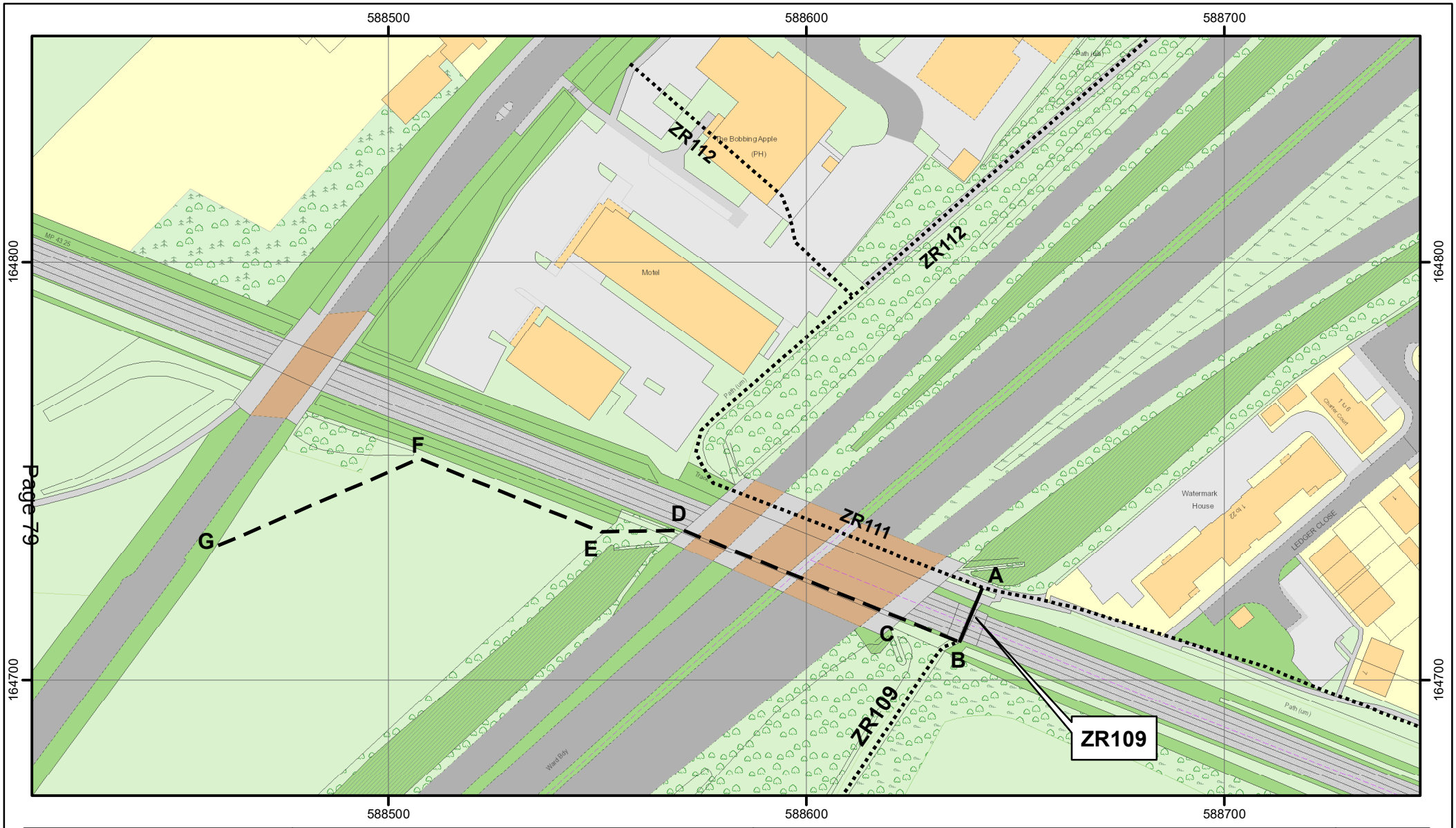
Accountable Officer:
Mr Graham Rusling – Tel: 03000 41 34 49 or Email: graham.rusling@kent.gov.uk
Case Officer:
Mrs Maria McLauchlan – Tel: 03000 41 34 20
or Email: maria.mclauchlan@kent.gov.uk

The documents on the case file are available for viewing on request at the PROW & Access Service, Invicta House, County Hall, Maidstone, Kent, ME14 1XX. Please contact the Case Officer for further details.

**List of appendices**

Appendix A - Plan of proposal
Appendix B - Extract from the Definitive Map, sheet 088 (TQ86SE)
Appendix C - Copy of the application
Appendix D - Narrative Risk Assessment
Appendix E - Memorandum of Understanding

**Case file reference - PROW/ZR109/12/NR**






**Key**

- Route to be diverted
- New length of route
- Unaffected Routes

**Highways Act 1980**
**Wildlife and Countryside Act 1981**
**The Kent County Council**
**Proposed rail crossing diversion of public footpath ZR109 (part) at Bobbing**

0 Kilometres 0.05 0.1
0 Miles 0.03 0.06

N

1:1,250

Produced by the KCC Public Rights of Way and Access Service



Public Rights of Way and Access Service

| Created by: | MMcL | Checked by: | DJ | Reference: | PROW/ZR681/11/NR |
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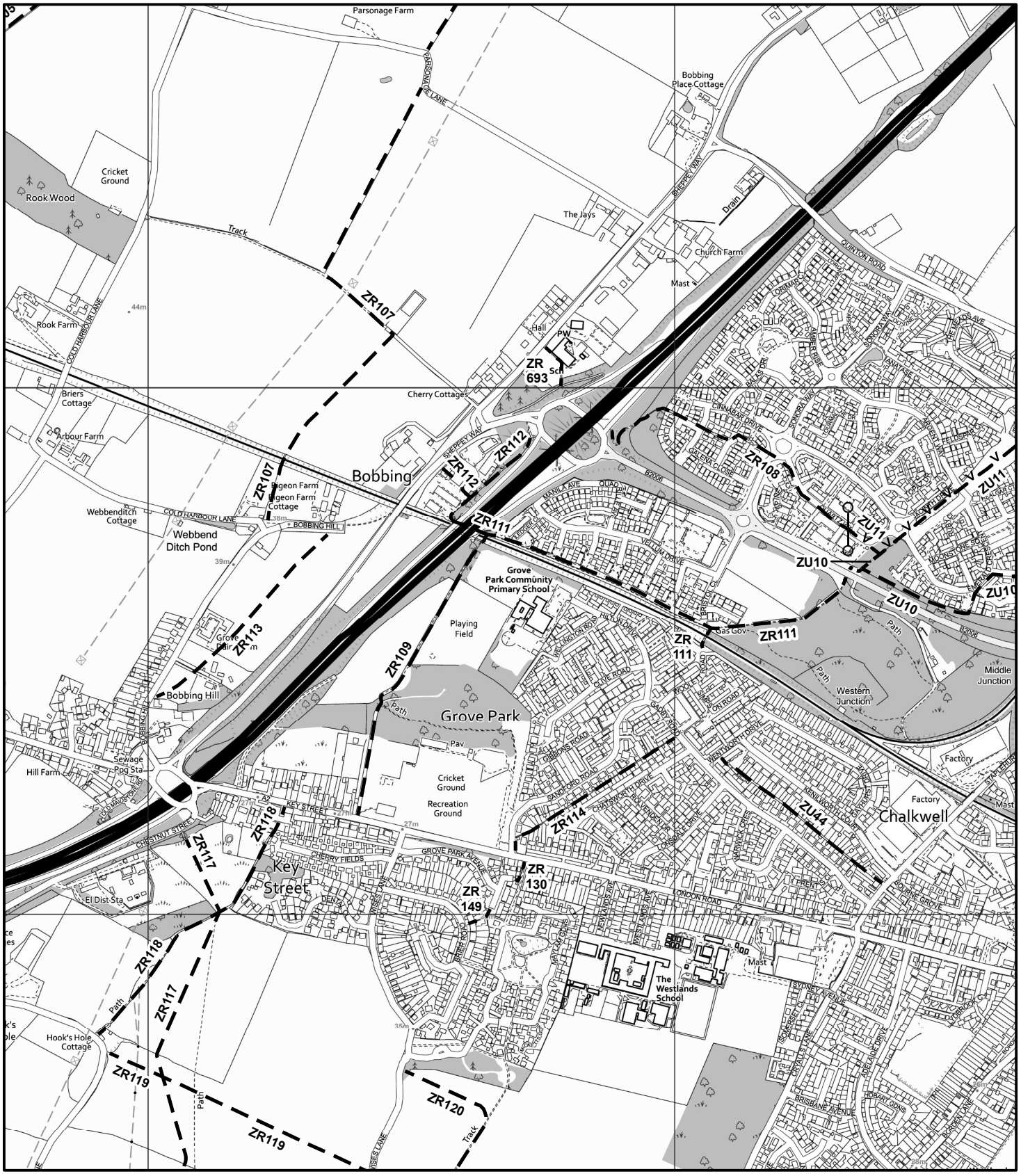


- Footpath
- Bridleway
- Restricted Byway
- Byway Open to All Traffic
- Point path number or status changes
- Boundary of area covered by 1:2500 scale Network Map
- Area covered by 1:2500 scale Network Map

**EXTRACT OF THE NETWORK COPY OF THE DEFINITIVE MAP OF PUBLIC RIGHTS OF WAY FOR THE COUNTY OF KENT**



**FOR REFERENCE ONLY – NO FURTHER COPIES MAY BE MADE**



Produced by the KCC Public Rights of Way and Access Service

| | |
|---|---|
| Created by: | MMcL |
| Map Sheet | 088 (TQ86SE) |
| Issue Date: | 23/01/2023 |
| Reference: | PROW/ZR109/13/NR |

N

1:10,000

0 0.5 1 Kilometres

0 0.25 0.5 Miles



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# Application Form

## for Diversion or Extinguishment of a Public Right of Way

PROW & ACCESS SERVICE

# Highways Act 1980

## Section 118A or 119A as amended by the Transport and Works Act 1992

**To be used in conjunction with Network Rail's – Crossing Closure Application Form.**

**For office use only:**

**Path number…….**

**Parish……**

**Schedule reference…….**

***Note: Please read Guidance Notes to help you complete this application***

## A. APPLICANT'S DETAILS

**1.** Full Name Darren James

**2.** Address Network Rail Infrastructure Ltd, Basingstoke Campus, Gresley Road, RG21 4FS

**3.** Telephone: 07395383830

**4.** Email address: darren.james@networkrail.co.uk

**5.** *Corporate customers only* -

**(a)** Full company name (incl. PLC or Ltd) Network Rail Infrastructure Ltd, Basingstoke Campus, Gresley Road, RG21 4FS

**(b)** Purchase Order number: TBC

**(c)** Accounts department email address to which invoice should be sent: Darren.james@networkrail.co.uk

**6.** Do you intend to be represented by a professional agent? Yes [ ] No [X]

Name: N/a

Address: N/a

Email address: N/a

Telephone number: N/a

Do you wish all future correspondence to be sent to: Self [X] Agent [ ]

## B. LAND OWNERSHIP AND OTHER INTERESTS

**1.** Are you the owner of all the land affected by your proposal?

Yes [ ] No [X]

*Please provide copies of the relevant Land Registry title documents with your application.*

If No, please provide the name and address of the other affected landowner(s) below and attach his/her written consent to this application.

There are three landowners affected by the proposals namely:

1. Kent County Council of County Hall, Maidstone, Kent, ME14 1XQ (Title numbers K610159 and K206266)
2. National Highways Ltd of Bridge House, 1 Walnut Tree Close, Guildford, GU1 4LZ (Title number K868210)
3. A Hinge and Sons Ltd of Farm Office, Oad Street, Borden, Sittingbourne, Kent, ME9 8JP (Title number K899615)

**2.** Are there any private rights affecting the existing or proposed routes?

Yes [ ] No [X]

If Yes, please provide details below including exactly where these rights exist.

N/a

**3.** Are there any other occupiers of the land affected by your proposal (e.g. any tenants)?

Yes [ ] No [X]

If Yes, please provide the name(s) and address(es) below.

N/a

## C. EXISTING ROUTE

1. Path Number: ZR111
2. Parish: Bobbing
3. Is the Right of Way a: Footpath [X] Bridleway [ ] Byway [ ] Restricted Byway [ ]
4. Is the existing definitive route of this path open and unobstructed?

Yes [ ] No [X] Partially [ ]

If obstructed, please provide details of how, where and over what period of time, and indicate the location of the obstruction on the plan accompanying this application.

Simpsons level crossing (the Crossing), through which Footpath ZR11 traverses, has been closed via a Temporary Traffic Regulation Order (TTRO) granted by Kent County Council (KCC) as of 26th March 2021 pending a permanent solution, hence this application.

## D. YOUR PROPOSAL

1. What are you proposing?

Diversion [X] Extinguishment [ ]

*Please provide a 1:2500 scale plan indicating the extent of your landownership, the affected section of path and the proposed new route (where applicable) and the location of any existing and proposed stiles, gates or bridges.*

The following has been annexed to this application:
**(a)** SDM1 – A plan illustrating the diversion route marked with the broken red line

The proposed new route shown in SDM1 starts at point A and ends at point G. the total length of the path to be extinguished is approximately 338 meters.

SDM1 shows the affected section of footpath ZR109 and the proposed new route, including the section under Bobbing Bypass overbridge which carries the A249. The section of footpath ZR109 that will be diverted is shown by the solid red line and this is approximately 13 meters long. The solid blue line from points A to B is 13 meters long.

The length of the proposed route is approximately 160 meters which can be broken down as follows:

- **(a)** Between points B and C, the proposed path will run under the A249 bridge for 58 meters.
- **(b)** From points C to D, the path runs from Network Rail's land onto land owned by Highways England, this section is approximately. At this point, there is a gentle incline into a field, and this continues until the path reaches Bobbing Road overbridge.
- **(c)** A Hinge and Sons Ltd owns most of the land between points D and E, the path here is 50 meters long.
- **(d)** Kent Country Council owns most of the land between points E and F, this section is 52 meters long.
- **(e)** The path goes from F to G is shown by the broken blue line. This is the section of the proposed route is an existing public highway and is approximately 145 meters. The path from F to G would take pedestrians over Bobbing Road overbridge which carries Sheppey Way. There is a footway between points F to G and parts of the footway are paved.

**Risk reduction options evaluation**

**(a) Closure and diversion via Sheppey Way Bridge (chosen option)**– Sheppey Way Bridge is approximately 160 meters from the Crossing and has a 40mph speed restriction. As such, there will be no requirement to erect and ARMCO barrier to separate the footpath from the road. A path some 2 meters wide currently exists along the pavement in parallel. However, the pavement will have to be extended some 50 meters to the steps at the entrance of the Premier Inn/Brewers Fayre in order to make way for the diversion. This option not only removes access to the railway, but also traverses land for which consent has been obtained from the relevant landowners in principle.

(b) **Closure and diversion via ramped approach to A249** – This diversion includes a ramped approach up to the A249 bridge onto a 3.6 meter pavement protected by an ARMCO barrier. The ramp can be easily constructed along the embankment which is owned by Highways England. If permitted, this diversion would be the shortest of the two possible diversions in this options selection. However, this proposal objected to by Highways England. Therefore, had to be discounted in favour of the alternative diversion above.

(c) **Closure via stepped footbridge** – Building a footbridge eliminates the risks to pedestrians using the footpath element of the Crossing. However, due to the stepped access this option is not feasible as Kent Council have insisted that any diversion has ramped access for all user types. As a result, this option has been discounted.

(d) **Closure via ramped footbridge** – Although this option would ordinarily satisfy Kent Council's requirements to provide ramped access, there is insufficient room to build this structure on the down side. The structure would be extremely large relative to the surroundings and encroach on nearby housing. Further, this option would likely be rejected had space not been an issue. As such, we have discounted this option.

(e) **Closure via an underpass** – If constructed, this would be an extremely challenging 'cut and cover' type construction carried out over a 54hr prolonged possession period. If an underpass were constructed 3 meters below railway level, this would need to be accommodated by some 60 meters of ramps at a 1:20 gradient. The length and invasive nature of the underpass to neighbouring properties would be particularly unattractive, not least due to the likelihood of anti-social behaviour. Also, due to the significant costs associated with digging through Victorian earth works, the direct impact on train services and the lack of knowledge of what may lay beneath the ground may amount to significantly higher costs than previous envisaged with no guarantee of economic viability as a result. Therefore, this option has been discounted.

(f) **Miniature stop lights (MSL)** – MSLs are lights that display red or green as crossing signals depending on whether a train is approaching. This option has been explored as a possible alternative to diversion. Signal EK4200 lies inside the potential strike-in point which renders an overlay MSL unfeasible at this location. An MSL interlocked with signalling will require significant investment as it will require strike-in from both sides of Western Junction and two locations depending on whether EK4200 is on red. Pursuant to the installation of an MSL, a phone ill be need to be installed as a secondary appliance in case the MSL is out of order. Further, a phone is likely to be subject to misuse in this location which would impede train efficiency following signalling cautions. Moreover, an MSL will reduce the risks associated with access to live railway infrastructure contrary to our mandate to eliminate the risk entirely. Therefore, we have discounted MSLs as a viable option.

2. What are the reasons for your proposal?

*Please provide as many details as possible as this will assist your application.*

As part of the operating licence, Network Rail's primary imperative is to operate a safe and efficient railway network. To that end, we regularly assess risk to the public and to the operation of the railway.

Network Rail's method of risk assessment of its crossings comprises two components:

1. Quantitative – a mathematical model called All Level Crossings Risk Assessment Model (ALCRM) which is composed of two elements:
   **(a)** Individual, expressed by a letter on a scale of A to M where A represents the highest individual risk, and;
   **(b)** Collective, expressed by a number on a scale of 1 to 13 where 1 represents the highest collective risk.
2. Qualitative, in the form of Narrative Risk Assessment which is complimented by ALCRM but also feeds important data into the ALCRM. It contains an assessment of the risk observed at the crossing, including but not limited to, line speed and train frequency, frequency and type of public use and misuse, sighting distances, environmental factors relevant to safety

In its most recent Narrative Risk Assessment (NRA) dated 2nd March 2020, the Crossing has been assigned an ALCRM score of C3, which means it is has a high to medium level of both individual and collective risk. It currently ranks 13th riskiest of 341 footpath/bridleway crossings on the Kent route.

The following key risk drivers were identified by ALCRM and contributed towards the risk score:

**Frequent trains**

The Crossing serves a mixture of passenger and freight trains with a maximum permissible line speed of 90mph timetabled to run 24 hours per day. The daily traffic consists of 156 timetabled trains which consists of:

**(a)** 73 high speed passenger trains formed of 6 coaches (120m in length) travelling up to 90mph,

**(b)** 64 Electrostar passenger trains formed of 4-12 coaches (80m-140m in length) travelling up to 75mph

**(c)** 19 465/466 passenger trains formed of 2-10 coaches (40m-200m in length) traveling up to 75mph.

*Note:*

- *Peak times will often impact the railway traffic passing the Crossing*
- *The line is also open 24hrs a day, 7 days a week.*

Considering the maximum attainable line speed, the magnitude of risk associated with the Crossing being left open can only be compared to allowing a pedestrian crossing on a motorway to exist. The daily frequency and variety of trains witnessed by the Crossing naturally presents inherent risks to the public. As a control measure to the frequency of trains, Network Rail empirically assesses these risks through the lens of factors consider within ALCRM, namely:

**(a) Risk of another train coming** – It is known that trains regularly pass each other in the vicinity of the Crossing due to busy nature of the route. Passing trains generate an additional hazard to users as they may block the user's sighting of another approaching train. A user who starts traversing the crossing on the basis that the train has passed may then step out behind a train assuming that it is safe to do so, only to step in front of another train. External influences such as being in a hurry, wearing headphones or simply the noise of the train passing may also

impact on the user's decision-making process to identify if another train is coming.

**(b) Crossing approaches** – There are signs at the Crossing which are clearly located on the direct route a user would navigate and are positioned so that they are clearly visible to users taking a direct route over the Crossing. However, the visibility of the signs is reduced at night or at dusk. Also, the approaches to the Crossing within the boundary fence are not considered to be steep, slippery or present a tripping hazard to able-bodied users. Thus, reasonably practicable measures have been employed to reduce the risk of using the Crossing.

**(c) Sighting** – A speed of 1.189 metres per second is used to calculate the time it takes an able-bodied user to traverse a crossing, i.e. pass from decision point to a position of safety on the other side. The recommended decision point for a footpath crossing stands at a minimum of 2m from the nearest running rail. The length of traverse is then calculated from this point until 2m past the furthest running rail. The Crossing has a decision point of 2m, a traverse length of approximately 9m, and the traverse time is 9 seconds.

Following a census carried out on 6 January 2018, it was revealed there were a high volume of vulnerable users, such as elderly and children, who frequently used the crossing. As a result, the traverse length at the Crossing must increase to 12 seconds.

The maximum line speed at the Crossing is 90mph for passenger trains and. For sighting calculations, the assessment is mandated to use the maximum attainable speed that trains can travel.

Not all trains will be travelling at line speed. This variance in speed is a recognised and important source of risk to those crossing the railway. It can, and often does, make it difficult to make accurate assumption about the speed of an approaching train and, in consequence, to decide whether it is safe to cross.

The point at which the train is considered to be visible is when the majority of the front of the train (including headlight) is visible; this must then remain visible without significant or total interruption/obscuration – either momentary or prolonged. Please refer to the table below which juxtaposes the minimum required and the actual sighting distance:

*Table 1.*

| All distances measured in metres | Minimum sighting distance required | Measured sighting distance | Is sighting compliant? |
|---|---|---|---|
| Upside looking toward up direction train approach | 375 | 382 | **Yes** |
| Upside looking toward down direction train approach | 482 | 853 | **Yes** |
| Downside looking toward up direction train approach | 375 | 421 | **Yes** |
| Downside looking toward down direction train approach | 482 | 853 | **Yes** |

According to Table 1, the Crossing is compliant when consider sighting distance for the average user. There are no known obstructions that could make it difficult for users to see approaching trains and no actions to improve sighting have been identified.

Within the remit of Network Rail's mandated risk appetite, measures within its control have been implemented to make the Crossing as safe as possible without closing it. In isolation, the frequency of trains and its associated risks mentioned above are within the compliant standard. However, the control measures purporting to mitigate the risks are ineffective when contextualised with the large number of users and the types of use which will be explored below.

## Large number of users

A surveillance survey was conducted over a period of 9 days from 6th January 2018 using Sotera cameras. Given the time of year, the study's findings applies to approximately 40% of the year. It was found that there were 60 daily users of the Crossing during the study period. There was no evidence of irregular users and were mainly local residents including pedestrians, elderly and children from a nearby school. There was no heavy usage at night. Based on the usage detected during this study, it is estimated that there is up to 120 daily users of the Crossing for the rest of the year pursuant to yearly trends across our network.

## Magnitude of incidents

Narrative Risk Assessments (NRA) are carried out by level crossing managers routinely to assess the risks associated with level crossings. The NRA forms the basis of an action to be taken by Network Rail to reduce the risk of a level crossing to a public which may include improved signage, decking, whistle boards, and even closure. However, if an incident is reported before an NRA is due for completion, the level crossing manager is required to conduct one as soon as practicable. The NRA annexed to this application was triggered due to reports of an incident, the details of which can be found below in Table 2.

**Table 2**

| Date | Event | Description |
|---|---|---|
| 21/02/2020 | Near miss | A pedestrian using the crossing in the path of an oncoming passenger train travelling at line speed. This led to Network Rail applying for a TTRO which is still in place. |
| 22/06/2019 | Near miss | A number of youths crossed in front of an oncoming passenger train travelling at line speed. |
| 25/05/2019 | Near miss | A lady carrying a young child crossed in front of an oncoming train travelling at line speed. |
| 20/05/2014 | Fatality | Fatality by suicide |
| 22/12/2013 | Fatality | Fatality by suicide |

The types of users and incidents at the Crossing are of such a magnitude that permanent closure is the only viable option to eliminate the risk of another fatality.

## Conclusion

With a line speed of 90 mph and 156 trains/day passing over the Crossing, including during the hours of darkness, the variation of train speeds as well as those passing in close proximity to the Crossing, it is evident from the data we have now acquired, that the Crossing poses an unacceptably high level of risk to both users of the public footpath and to train operations. Therefore, we invite KCC to make an order to divert Footpath ZR109 over our proposed diversion route as it is expedient in the interest of safety of members of the public.

3. What is the proposed width of the new route (where applicable)?

*A minimum of 2 metres should be provided for footpaths, 3 metres for bridleways and 4 metres for restricted byways. If the path is to be fenced, an additional 0.5 metres will be required. Where the Definitive Statement records a width for the existing path then it is that width which must be provided for the new route. However, Kent County Council may specify a lesser or greater width where it considers it expedient to do so.*

The diversion route will provide a 2m width footpath to facilitate safe access around the railway.

## E. WORKS

1. Please indicate on the plan and detail below any works that may be required to bring the new route into a fit condition for public use (eg clearance of trees, undergrowth, demolition of buildings, making up ground, drainage, surfacing, fencing, steps, ramps).

TBC

*Any works carried out in connection with the Orders will have to meet the County Council's specifications and standards.* ***No works should be carried out until the Order has been confirmed.*** *Works must then be completed within 28 days of the Order being confirmed, or within a suitable period agreed with the Order Making Authority and prescribed in the Order.*

## F. LOCAL CONSULTATIONS

1. Consultees will require access to inspect the proposed route. Do they need to make contact with anyone before doing so?

Yes [X] No [ ]

If yes, please give details below:

Name: Darren James

Address: Darren.james@networkrail.co.uk

Telephone number: 07395383830

*Please note that this information will be included on the consultation letter and will therefore be available to the public.*

# G. YOUR APPLICATION

1. I apply to change the Public Rights of Way network as indicated in this application form and as shown on the attached plan. I undertake to meet the County Council's full costs and all advertising costs in promoting the Order whether or not it is successful. Furthermore, if I withdraw my application at any stage, I also undertake to meet the County Council's full administrative costs and any advertising costs up to that point. The County Council will use its best endeavours within the statutory framework to bring your proposal to an early conclusion although it cannot guarantee the eventual outcome.

2. –

   **(a)** I undertake to meet the County Council's full costs for carrying out the works necessary to bring the new path into a fit condition for public use.

   or

   **(b)** I undertake to carry out the necessary works myself or by employing a contractor to bring the new path into a fit condition for public use to the County Council's satisfaction. I also undertake to meet the County Council's full costs for the delivery of furniture, installing any necessary fingerposts and/or waymarking the new path.

   Please be advised that if the necessary works are not completed to the required standard within 3 months of the Order being confirmed (unless agreed otherwise) then the County Council reserves the right to undertake the works and recharge you the full costs for carrying out those works.

3. I undertake the responsibility of cooperating in a timely manner with the County Council and assisting in the process where requested by the case officer. The County Council reserves the right to cease to process an application where the applicant fails to meet reasonable response deadlines set by the Case Officer (and an invoice will be raised for works undertaken to date).

4. I undertake to indemnify the County Council against claims in accordance with relevant Provisions of the Town and Country Planning Act 1990 and the Highways Act 1980 in respect of compensation for depreciation in value of an interest in land or for disturbance in enjoyment of land consequent upon the making of an Order;

5. I undertake to indemnify the County Council against any expenses incurred by the Council in connection with the making and confirmation/certification of any Order that may be made in respect of this application.

6. I certify that I have sought and obtained permission from all other landowners affected by this proposal (where applicable) as detailed in section A.

7. I note that this application cannot be treated as confidential and a copy of this form and any accompanying documents may come into the public domain at any time. A copy of this form and any accompanying documents may also be disclosed upon receipt of a request for information under the Environmental Information Regulations 2004 or the Freedom of Information Act 2000.

8. I give consent for the personal details that I have provided in this application form to be stored, as part of the original application form, on the relevant footpath file indefinitely.

**Signature of applicant and all registered landowners**

**Signature** D James **Date**: 30/01/2022

**NAME IN CAPITAL LETTERS PLEASE** DARREN JAMES

**Signature** …… **Date** ……

**NAME IN CAPITAL LETTERS PLEASE**……

**Signature** …… **Date** ……

**NAME IN CAPITAL LETTERS PLEASE**……

**Please ensure that the application form has been completed in full and is accompanied by a plan of the proposal at a scale of at least 1:2500, preferably based upon an Ordnance Survey Map extract providing you comply with their Copyright conditions. The plan will need to show the entire length of the existing path(s) concerned in a solid line and the proposed new route(s) in bold dashed lines, together with the location of any stiles, gates, bridges, culverts or other works necessary to bring the new route into effect. The extent of landownership(s) will also need to be shown on the plan and proof of ownership provided.**

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**NARRATIVE RISK ASSESSMENT – PASSIVE TEMPLATE FINAL v2.0**

# PASSIVE LEVEL CROSSING RISK ASSESSMENT

## 1. LEVEL CROSSING OVERVIEW AND ENVIRONMENT

### *1.1 LEVEL CROSSING OVERVIEW*

This is a trigger risk assessment for Simpsons level crossing.

| Crossing details | |
|---|---|
| **Name** | Simpsons |
| **Type** | FPW |
| **Crossing status** | Public Footpath |
| **Overall crossing status** | Open |
| **Route name** | Southern, Kent |
| **Engineers Line Reference** | VIR, 43m, 32ch |
| **OS grid reference** | TQ886647 |
| **Number of lines crossed** | 2 |
| **Line speed (mph)** | 90 |
| **Electrification** | Yes, DC |
| **Signal box** | SITTINGBOURNE |

| Risk assessment details | |
|---|---|
| **Name of assessor** | Gemma Kent |
| **Post** | Level Crossing Manager |
| **Date completed** | 02/03/2020 |
| **Next due date** | 06/02/2021 |
| **Email address** | Gemma.Kent@netwokrail.co.uk |
| **Phone number** | 07801902008 |

| ALCRM risk score | |
|---|---|
| **Individual risk** | C |
| **Collective risk** | 3 |
| **FWI** | 0.00966433 |

### *1.2 INFORMATION SOURCES*

The table below shows the stakeholder consultation that was undertaken as part of the risk assessment.

| Consulted | Attended site |
|---|---|
| None | None |

*Stakeholder consultation and attendance notes:*

| |
|---|
| Stakeholder not required as part of the risk assessment |

The reference sources used during the risk assessment included:

- Trust for train data
- Sotera Census
-

### *1.3 ENVIRONMENT*

**Up side crossing approach**


**Down side crossing approach**

The environment surrounding Simpsons level crossing consists of rural area with fields or other open land in the vicinity.

It is a public footpath level crossing. There are no stations visible at the level crossing.

At Simpsons level crossing the orientation of the road/path from the north is 30°; the orientation of the railway from the north to the up line in the up direction is 310°. Low horizon can result in sun glare; sun glare is not a known issue.

There are planned or apparent developments near the crossing which may lead to a change or increase in use or risk.

*Site visit general observations:*

| |
|---|
| Simpsons is a footpath crossing situated in Bobbing which is approx. 2.5 miles from Sittingbourne. The crossing sits behind the Bobbing Premier Inn and underneath the A249. The footpath leads to the A2 on the upside and on the downside it leads to the Premier Inn, The Bobbing Apple Pub and also a McDonalds, as well as to various housing estates.<br>The crossing has two schools close by, Grove Park Primary and Westlands School, the crossing is used by pupils from both these schools. There is also Evolution kids club and Nursery close by.<br>The Redrow and Archers Park residential developments have been completed recently and there is a proposed new school located east of Vellum Drive, which will provide places for 168 young people with Autism Spectrum Disorder or speech, language and communication needs. Such developments are likely to increase the level of usage at the crossing and potentially also the vulnerability of the users. Pedestrians seeking to get access to the potential new school from the south are more likely to utilise the Woolett Road/Vellum Drive underpass. |

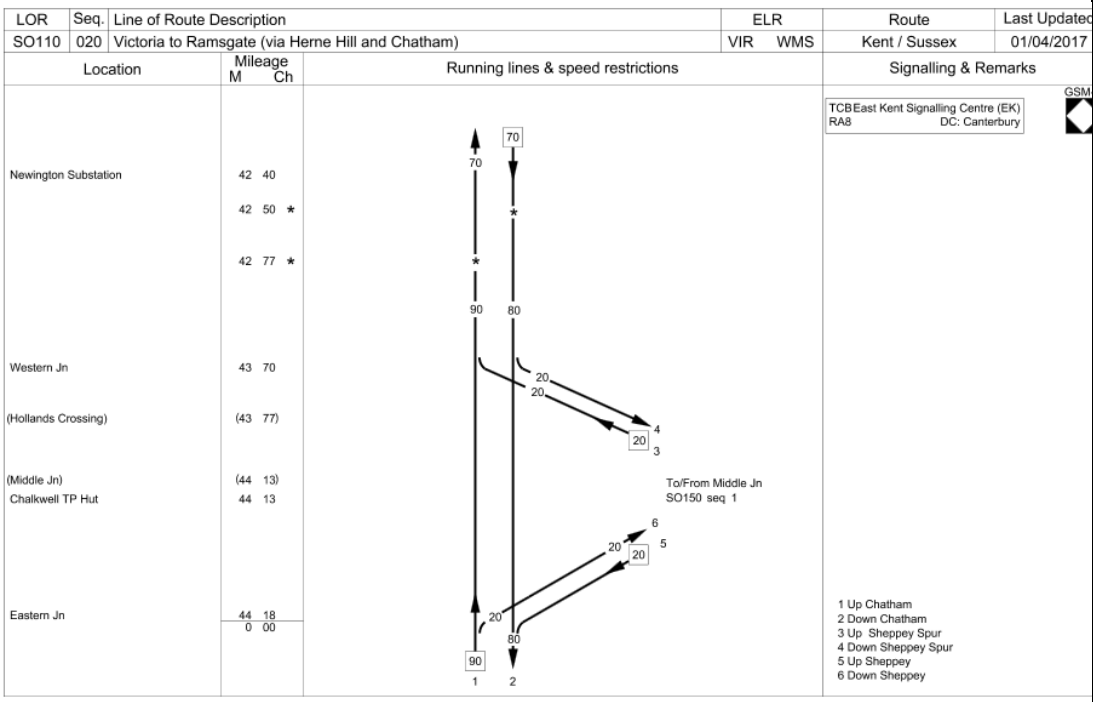
## 2. LEVEL CROSSING USAGE

### *2.1 RAIL*

The train service over Simpsons level crossing consists of passenger trains. There are 186 trains per day. The highest permissible line speed of trains is 90mph. Trains are timetabled to run for 24 hours per day.

*Assessor's notes:*

Total number of trains per day = 186 trains (92 up trains and 94 down trains)




Train count for ALCRM is
1-Train type = Passenger, Number of trains 83, Train length 160 metres, Speed = 80 mph.
2-Train type = Passenger, Number of trains 84, Train length 160 metres, Speed = 90 mph.
3-Train Type = Passenger, Number of trains 19, Train length 120 metres, Speed = 75 mph.

The first group are trains formed of various lengths from 4 to 12 carriages (80 to 240 metres).
The second group are trains formed of various lengths from 4 to 12 carriages (80 to 240 metres).
The third group are passenger trains which are formed of various lengths between 2 cars (40 metres) and 10 cars (100 metres) formed of slower class 465 and / or 466 units which can only reach 75mph.
No account has been taken of station stops or differing line speeds including accelerating / braking for these speeds.

Further Information

This crossing is located on the Gillingham to Sittingbourne line and Gillingham to Sheerness-on-Sea line. All passenger trains are operated by the Southeastern franchise.

Rolling stock used is in the form of Electrical Multiple Units. Class 375s operate on the Victoria / Cannon Street services via Gillingham towards Faversham / Dover and the Thanet area. A small number of trains (usually class 465/466 traction) operate between Victoria and Dover Priory also trains heading towards the Sheerness line. There is an half - hourly service from / to St Pancras formed of 6 car class 395 high speed Javelin trains with the odd peak hour train running as a 12 carriage service.

Typically, there are 5 trains per hour in each direction on this line off peak.

The busiest hours during the peak periods are 1800 to 1900 and 1900 to 2000 when 12 trains per hour operate.

All passenger trains are powered by the third rail at 750dc.

Actual count

| Up Trains | Trains (Number of coaches / type of train) | Down Trains |
|---|---|---|
| 35 | 6 / 395 (High Speed trains) | 34 |
| 2 | 12 / 395 (High Speed trains) | 2 |
| 14 | 4 / 375 Electrostar | 14 |
| 6 | 7 / 375 Electrostar | 8 |
| 18 | 8 / 375 Electrostar | 21 |
| (1) 7 | (11) or 12 / 375 Electrostar | (1) 4 |
| 1 | 10 / 465+465+466 | 0 |
| 7 | 6 / 465+466 | 8 |
| 0 | 4 /465 | 1 |
| 1 | 2 / 466 | 1 |

There are no booked freight trains on this route. Occasionally additional traffic operates in the form of engineers trains and Southeastern empty coaching stock between Gillingham and Faversham sidings or Ramsgate depot.

Night time rail traffic. The line is open 24 hours a day 7 days a week.
Traffic can be expected over the crossing at any time of the day or night.
During the NTQP there are 6 up trains and 7 down trains timetabled to operate.

Last train on the up is at 01:02. First train on the up is at 05:11
Last train on the down is at 01:13. First train on the down is at 05:07

Standard Off peak hourly trains over the crossing expected on the up at 11, 15, 32, 40 & 47 past
Standard Off peak hourly trains over the crossing expected on the down at 12, 20, 41, 50 & 58 past.

## *2.2 USER CENSUS DATA*

A 9 day cameras census was carried out on 06/01/2018 by Sotera cameras. The census applies to 40% of the year.

The census taken on the day is as follows:

| | |
|---|---|
| **Pedestrians** | 60 |
| **Pedal cyclists** | 0 |
| **Horses / riders** | 0 |
| **Animals on the hoof** | 0 |

Available information indicates that the crossing has a high proportion of vulnerable users.

*Vulnerable user observations:*

There is a high number of vulnerable users -the crossing is used by children, elderly, pushchairs

Available information indicates that the crossing does not have a high number of irregular users.

*Irregular user observations:*

The crossing does not have a high amount of irregular users as it is used mostly by locals from the area

Information gathered indicates that Simpsons level crossing does not have a high number of users during the night or at dusk.

*Site visit night / dusk user observations:*

| |
|---|
| There was not a heavy used at night |

*Assessor's general census notes:*

| |
|---|
| Census taken by Sotera in 2018 and I don't believe the census would have changed much if at all - another census is going to be completed in the summer 2020 |

### *Second user census*

An estimated 24 hour census has been used. The census was estimated on 08/03/2018 by Gemma Kent. The census applies to 60% of the year.

The census taken on the day is as follows:

| | |
|---|---|
| **Pedestrians** | 120 |
| **Pedal cyclists** | 0 |
| **Horses / riders** | 0 |
| **Animals on the hoof** | 0 |

Available information indicates that the crossing has a high proportion of vulnerable users.

*Vulnerable user observations:*

| |
|---|
| LCM has observed vulnerable users on numerous site visits and through reviewing the camera footage, as well as engaging with local schools. |

Available information indicates that the crossing does not have a high number of irregular users.

*Irregular user observations:*

| |
|---|
| Not a high amount of irregular users- used by people from the local area and school |

Simpsons level crossing does not have a high number of users during the night or at dusk.

*Site visit night / dusk user observations:*

| |
|---|
| Not heavily used at night |

*Assessor's general census notes:*

| |
|---|
| The Sotera census was taken in January and so I only used the census for 40% of the year. The second census is for the rest of the year as during the dryer months the crossing is used a lot more with dog walkers and youths going from the local schools to Mcdonalds. |

### *2.3 USER CENSUS RESULTS*

ALCRM calculates usage of the crossing to be 0 road vehicles and 96 pedestrians and cyclists per day.

## 3. RISK OF USE

### *3.1 SIGHTING AND TRAVERSE*

At Simpsons level crossing, the decision point and traverse lengths are calculated as:

| | Decision point (m) | Traverse length (m) | Measured from |
|---|---|---|---|
| Up side | 2 | 9 | Between the wing fence posts |

| | | | |
|---|---|---|---|
| Down side | 2 | 9 | Between the wing fence posts |

Timber decking is provided over the level crossing. The decking is considered to be wide enough for all users of the crossing. It is fitted with a non slip surface.

The traverse times are calculated as:

| | Traverse time (s) |
|---|---|
| Pedestrians | 12 |

The current census has identified a high proportion of vulnerable users. The pedestrian traverse time has been increased by 50% to account their traverse.

*Assessor's traverse time notes:*

| |
|---|
| Traverse time increased by 50% for vulnerable users |

Sighting was measured by the following means:

- Using Range Finder

Sighting, measured in metres, at Simpsons level crossing is recorded as:

| All distances are recorded in metres | Minimum sighting distance required | Measured sighting distance | Sighting distance measured to | Is sighting compliant? | If deficient, is sighting distance mitigated? | Notes on deficient sighting time mitigations |
|---|---|---|---|---|---|---|
| Up side looking toward up direction train approach | 375 | 382 | Drum on Downside | Yes | n/a | TSR- 70mph |
| Up side looking toward down direction train approach | 482 | 853 | Second bridge | Yes | n/a | n/a |
| Down side looking toward up direction train approach | 375 | 421 | Down side signal | Yes | n/a | TSR- 70mph |
| Down side looking toward down direction train approach | 482 | 853 | Bridge | Yes | n/a | n/a |

Sighting restrictions are recorded as follows:

| | Up Direction | Down Direction |
|---|---|---|
| Nothing; vanishing point | NO | YES |
| Track curvature | YES | NO |
| Permanent structure (building/wall etc) | NO | NO |
| Signage or crossing equipment | NO | NO |
| Vegetation | NO | NO |
| Bad weather on the day of visit | NO | NO |
| Other | NO | NO |

There are no known obstructions that could make it difficult for users to see approaching trains. There are no known issues with foliage, fog or other issues that might impair visibility of the crossing, crossing equipment or approaching trains.

Actions to improve sighting have not been identified.

*Assessor's improving sighting and decision point notes*

| |
|---|
| Vegetation needs to be maintained on the upside in the down direction |

*Assessor's general sighting and traverse notes:*

| |
|---|
| There is currently a speed restriction on the up line of 70mph due to a lack of sighting and whistle boards being removed because of noise complaints. |

## *3.2 EVALUATION OF MITIGATIONS*

## *3.3 CROSSING APPROACHES*

The signs at Simpsons level crossing are located on the direct route a user would take over the level crossing, they are positioned so that they are clearly visible to users taking a direct route over the level crossing. The visibility of the signs is reduced at night or at dusk.

The approaches to the crossing within the boundary fence are not considered to be steep, slippery or present a tripping hazard to users.

*Assessor's notes:*

| |
|---|
| The steps up to the crossing on the downside were improved and the step ups onto the deck removed. |

There are no adjacent sources of light or noise that could affect a users' ability to see or hear approaching trains.

*Assessor's general crossing approach notes:*

| |
|---|
| User would need personal light source at night as the area is unlit |

## *3.4 AT THE CROSSING – ANOTHER TRAIN COMING RISK*

Trains are sometimes known to pass each other at this crossing.

*Assessor's another train coming notes:*

| |
|---|
| Trains are not timetabled to pass each other at this location, however due to it being a very busy line with 186 trains per day and freight or engineering train also operate, trains do occasionally pass at this location. |

## *3.5 INCIDENT HISTORY*

A level crossing safety event has been known to occur at Simpsons level crossing in the last twelve months.

*Assessor's incident history notes:*

| |
|---|
| There was a near miss here on the 21.02.20, which resulted in this trigger risk assessment.<br><br>There have been a number of incidents at Simpsons in the last year. There has also been a couple of suicides at this crossing in the past.<br><br>25.05.19 – Youths crossed in front of train<br>22.06.19 – Women holding a child crossed infront of train |

## 4. ALCRM CALCULATED RISK

*Simpsons **level crossing ALCRM results***

**Key risk drivers:** ALCRM calculates that the following key risk drivers influence the risk at this crossing:

- Frequent trains
- Large number users
- Low sighting

*Assessor's key risk drivers notes*

- There are 186 trains per day. Due to increased passenger and train demand this is unlikely to decrease in the future.
- There are up to 120 people using the crossing per day and due to the local schools, attractions and increasing housing estates this is unlikely to decrease.

Due to a curve in the track there is low sighing on the up side of the crossing.

| **Safety risk** | | | | |
|---|---|---|---|---|
| Compared to other crossings the safety risk for this crossing is | **Individual risk** | | **Collective risk** | |
| | **C** | | **3** | |
| | **Individual risk (fraction)** | **Individual risk (numeric)** | | |
| | | | | |
| Car | 0 | 0 | 0 | |
| Van / small lorries | 0 | 0 | 0 | |
| HGV | 0 | 0 | 0 | |
| Bus | 0 | 0 | 0 | |
| Tractor / farm vehicle | 0 | 0 | 0 | |
| Cyclist / Motor cyclist | 0 | 0 | 0 | |
| Pedestrian | 1 in 7295 | 0.000137066 | 0.009605578 | |
| | | | | **Derailment contribution** |
| Passengers | | | 0 | 0 |
| Staff | | | 0.000058752 | 0 |
| **Total** | | | 0.00966433 | 0 |
| | | | | |
| **Collision frequencies** | **Train / user** | **User equipment** | **Other** | |
| Vehicle | 0 | 0 | 0 | |
| Pedestrian | 0.011750476 | 0.000841715 | 0.002305638 | |
| | | | | |
| **Collision risk** | **Train / user** | **User equipment** | **Other** | |
| Vehicle | 0 | 0 | 0 | |
| Pedestrian | 0.009541386 | 0.000013467 | 0.000050724 | |

## 5. OPTION ASSESSMENT AND CONCLUSIONS

### *5.1 OPTIONS EVALUATED*

The options evaluated to mitigate the risks at Simpsons crossing include:

| Option | Term[1] | ALCRM risk score | ALCRM FWI | Safety Benefit | Cost | Benefit Cost Ratio | Status | Comments |
|---|---|---|---|---|---|---|---|---|
| Closure with ramped approaches onto A249 | Long | M13 | 0 | 0.00966433 | 1m | 0.57 | Complete | See section 5.2 |
| Closure with diversion to Sheppey Way road bridge | Long | M13 | 0 | 0.00966433 | 1m | 0.57 | Complete | See section 5.2 |
| Closure with Stepped footbridge | Long | M13 | 0 | 0.00966433 | 3m | 0.19 | Complete | See section 5.2 |
| Closure with ramped footbridge | Long | M13 | 0 | 0.00966433 | 3m | 0.19 | Complete | See section 5.2 |
| Closure and underpass | Long | M13 | 0 | 0.00966433 | 5m | 0.11 | Complete | See section 5.2 |
| Closure via divert | Long | M13 | 0 | 0.00966433 | 100,000 | 1.55 | Complete | See section5.2 |
| MSL | Long | C3 | 0.005500635 | 4.16E-03 | 1m | 0.00 | Complete | See section 5.2 |
| | | | | | | | | |
| | | | | | | | | |

NOTES
Network Rail always evaluates the need for short[1] and long term risk control solutions. An example of level crossing risk management might be; a short term risk control of a temporary speed restriction with the long term solution being closure of the level crossing and its replacement with a bridge.
[1] Includes interim

CBA gives an indication of overall business benefit. It is used to support, not override, structured expert judgement when deciding which option(s) to progress. CBA might not be needed in all cases, e.g. standard maintenance tasks or low cost solutions (less than £5k).

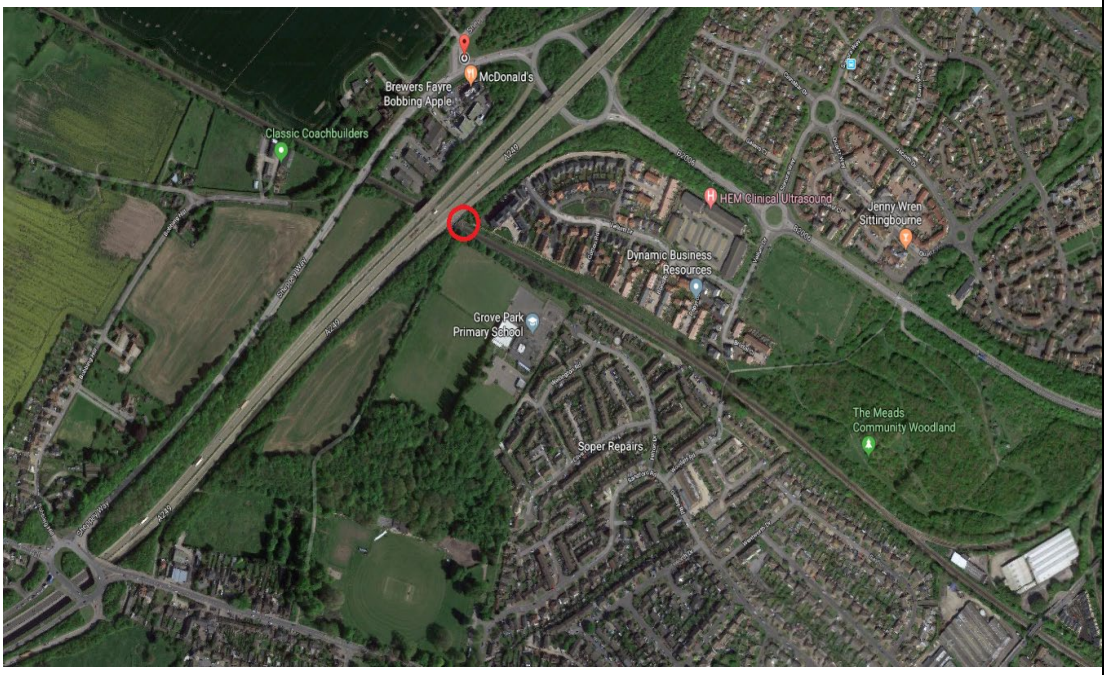
The following CBA criteria are used as a support to decision making:

a. benefit to cost ratio is ≥ 1: positive safety and business benefit established;
b. benefit to cost ratio is between 0.99 and 0.5: reasonable safety and business benefit established where costs are not grossly disproportionate against the safety benefit; and
c. benefit to cost ratio is between 0.49 and 0.0: weak safety and business benefit established.

## *5.2 CONCLUSIONS*

Assessor's notes:

Simpsons is a footpath crossing situated in Bobbing which is approx. 2.5 miles from Sittingbourne. The crossing sits behind the Bobbing Premier Inn and underneath the A249. The footpath leads to the A2 on the upside and on the downside it leads to the Premier Inn, The Bobbing Apple Pub and also McDonalds, as well as to various housing estates.
The crossing has two schools close by, Grove Park Primary and Westlands School, the crossing is used by pupils from both these schools. There is also Evolution kids club and Nursery close by. The crossing also has a lot of houses close by, some of which were built in recent years.




Current Risk
Simpsons is ranked 13/341 for level crossing risk in Kent and 2/168 for Footpath risk in Kent.
The crossing has remained as a C3 for a number of years.

Risk Reduction
There is currently a project looking at the options for this crossing, which are as followed:

**Closure with ramped approached onto A249**
A249 road bridge is nearby and has suitable route for pedestrians including a 3.6m wide pavement protected by an Armco barrier. This is potentially a realistically feasible method to provide ramps on the approaches as they could be constructed using the existing embankment. It should be noted that Highways England are currently opposed to this. In consultation, the Council have stated a preference that any grade separated solution should have ramps even though the existing crossing has steps. A cost estimate for the project has been made based on no provision to increase parapet height beyond 1.5m or for further segregation of the footpath from the road beyond supplying a handrail.

**Closure with diversion to Sheppey Road Bridge**
The Sheppey Way Road bridge is 160m from the crossing and there is potential to divert to this location. The road has a 40mph speed limit and so there would be not be requirement to have an ARMCO barrier separating the footpath from the road. There is an existing pavement of approximately 2m in width although the pavement would have to be extended at least to the steps to the entrance to the Premier Inn/Brewers Fayre and probably to the road entrance about 50m further on.

Consultation with Kent County Council has indicated that their preference is for the shorter diversion to the A249 bridge and diversion to the Sheppey Way road bridge would only be considered if the diversion to the A249 road bridge proves not to be feasible.

**Closure via stepped footbridge**
The council have been approached and they are likely to object to a solution that does not have ramped provision. As such, a stepped only solution is not considered to be feasible.

**Closure with ramped footbridge**
There is insufficient room for a ramped bridge on the Down side. A ramped structure would be extremely large and encroach on nearby housing. Even if a structure could be fitted in, it is very likely to receive objections and would be equally unlikely to get through planning.

**Closure and underpass**
The construction would be a cut and cover type construction after removal of the tracks and could probably carried out in a prolonged (54hr) possession. Extremely challenging construction - two routes on Down side. If floor of subway was 3m below ground level ramps of 60m would be required for 1:20 gradient. This would result in a long subway, which may be unattractive particularly on the Down side where the subway would have to connect with footpaths running parallel with the railway. Feasible but safety benefits would not justify high cost. Likely to be subject to flooding and so drainage would be an issue. Underpasses can attract anti-social behaviour.

**Closure via diversion**
The crossing is well used. While a diversion to the underpass 460m from the crossing on the south side of the railway, there is an existing right of way through that underpass. Two thirds of the crossing users utilise the subway under the A249. For these users, there is an additional 1km walk to go via the railway subway, which is unlikely to be considered to be 'convenient'. Discussions with Kent County Council indicate that closure without making alternative arrangements is unlikely to be acceptable.

**MSL**
Signal EK4200 lies inside the potential strike in point and so an overlay MSL not feasible in this location. An MSL interlocked with signalling likely to require significant investment, particularly as it will require strike in from both sides of Western junction and from two locations depending whether EK4200 is at red. If an MSL was installed, there would be a need to provide to provide a phone as back-up in case the MSL was not operational. A phone is likely to receive a large amount of mis-use in this location, which would affect train performance as the signaller will have to caution trains if the phone is left off the hook. MSL not preferred by operational personnel for this reason and would also have high capital cost.

<u>Recommendation</u>
Taking into consideration the above and also my own knowledge of the crossing, as well as the continued misuse and the high amount of vulnerable users I am recommending closure of the crossing.
Network Rail will pursue stopping up at this location in due course.

## ANNEX A – ADDITIONAL PHOTOGRAPHS

**Upside across crossing**

**Downside across crossing**

**Upside up direction train approach**

**Upside down direction train approach**

**Downside up direction train approach**

**Downside down direction train approach**

## ANNEX B – HAZARD IDENTIFICATION AND RISK CONTROLS

The table below is intended for use by risk assessors when identifying hazards and risk control solutions. It is not an exhaustive list or presented in a hierarchical order.

| | Hazard | Control |
|---|---|---|
| **Road vehicle and train collision risk** | Examples at the crossing include:<br>• insufficient sighting and / or train warning for all vehicle types; known to be exacerbated by the driving position, e.g. tractor<br>• level crossing equipment and signage is not conspicuous or optimally positioned<br>• instructions for safe use might be misunderstood e.g. signage clutter detracts from key messages, conflicting information given<br>• high volume of unfamiliar users, e.g. irregular visitors, migrant workers<br>• known user complacency leading to high levels of indiscipline, e.g. failure to use telephone, gates left open<br>• type of vehicle unsuitable for crossing;<br>- large, low, slow making access or egress difficult and / or vehicle is too heavy for crossing surface<br>- risk of grounding and / or the severity of the gradient adversely affects ability to traverse<br>• poor decking panel alignment / position on skewed crossing<br>• where telephones are provided, users experience a long waiting time due to:<br>- long signal section (Signaller unaware of exact train location)<br>- high train frequency<br>• insufficient or excessive strike in times at MSL crossings<br>• high chance of a second train coming<br>• high line speed and / or high frequency of trains<br>• unsuitable crossing type for location, train service, line speed and vehicle types | Controls can include:<br>• optimising the position of equipment and / or signs<br>• removing redundant and / conflicting signs<br>• engaging with signalling engineers to optimise strike in times<br>• upgrading of asset to a higher form of protection<br>• downgrading of crossing by removing vehicle access rights<br>• optimising sighting lines and / or providing enhanced user based warning system, e.g. MSL<br>• re-profiling of crossing surface<br>• engaging with stakeholders / authorised users to reinforce safe crossing protocol, legal responsibilities and promote collaborative working<br>• widening access gates and / or improving the crossing surface construction material<br>• realigning or installing additional decking panels to accommodate all vehicle types<br>• implementing train speed restriction or providing crossing attendant |
| **Pedestrian and train collision risk** | Examples include:<br>• insufficient sighting and / or train warning | Controls can include:<br>• optimising the position of equipment and / or signs<br>• removing redundant and / conflicting signs |

| | Hazard | Control |
|---|---|---|
| | • ineffective whistle boards; warning inaudible, insufficient warning time provided, known high usage between 23:00 and 07:00<br>• high chance of a second train coming<br>• high line speed and / or high frequency of trains<br>• level crossing equipment and signage is not conspicuous or optimally positioned<br>• location and position of level crossing gates mean that users have their backs to approaching trains when they access the level crossing, i.e. users are initially unsighted to trains approaching from their side of the crossing<br>• instructions for safe use might be misunderstood e.g. signage clutter detracts from key messages, conflicting information given<br>• surface condition or lack of decking contribute to slip trip risk<br>• known high level of use during darkness<br>• increased likelihood of user error, e.g. crossing is at station<br>• free wicket gates might result in user error<br>• high volume of unfamiliar users, e.g. irregular visitors / ramblers, equestrians<br>• complacency leading to high levels of indiscipline, e.g. users are known to rely on knowledge of timetable<br>• high level of use by vulnerable people<br>• where telephones are provided i.e. bridleways, users experience a long waiting time due to:<br>- long signal section (Signaller unaware of exact train location)<br>- high train frequency<br>• insufficient or excessive strike in times at MSL crossings<br>• unsuitable crossing type for location, train service, line speed and user groups<br>• high usage by cyclists<br>• degree of skew over crossing increases traverse time and users' exposure to trains | • upgrading of asset to a higher form of protection<br>• optimising sighting lines, e.g. de-vegetation programme, repositioning of equipment or removal of redundant railway assets<br>• implementing train speed restriction or providing crossing attendant<br>• providing enhanced user based warning system, e.g. MSL<br>• engaging with stakeholders / authorised users to reinforce safe crossing protocol, legal responsibilities and promote collaborative working<br>• installing guide fencing and / or handrails to encourage users to look for approaching trains, read signage or cross at the designed decision point<br>• re-design of crossing approach so that users arrive at the crossing as close to a 90° angle as possible<br>• installing lighting sources<br>• engaging with signalling engineers to optimise strike in times<br>• providing decking or improving crossing surface, e.g. holdfast, strail, non-slip surface<br>• providing cyclist dismount signs and / or chicanes<br>• straightening of crossing deck |

| | Hazard | Control |
|---|---|---|
| | • crossing layout encourages users not to cross at the designed decision point; egress route unclear especially during darkness schools, local amenities or other attractions are known to contribute towards user error | |
| **Pedestrian and road vehicle collision risk** | Examples include:<br>• a single gate is provided for pedestrian and vehicle users where there is a high likelihood that both user groups will traverse at the same time<br>• the position of pedestrian gate forces / encourages pedestrian users to traverse diagonally across the roadway<br>• road / footpath inadequately separated; footpath not clearly defined<br>• condition of footpath surface increases the likelihood of users slipping / tripping into the path of vehicles | Controls can include:<br>• providing separate pedestrian gates<br>• clearly defining the footpath; renew markings<br>• positioning pedestrian gates on the same side of the crossing<br>• improving footpath crossing surface so it is devoid of potholes, excessive flangeway gaps and is evenly laid<br>• improving crossing surface, e.g. holdfast, strail, non-slip surface |
| **Personal injury** | Examples include:<br>• skewed crossing with large flangeway gaps results in cyclist, mobility scooter, pushchair or wheelchair user being unseated<br>• condition of footpath surface increases the likelihood of users slipping / tripping<br>• degraded gate mechanism or level crossing equipment<br>• barrier mechanism unguarded / inadequately protected | Controls can include:<br>• improving fence lines<br>• reducing flangeway gaps and straightening where possible<br>• providing decking or improving crossing surface, e.g. holdfast, strail, non-slip surface<br>• straighten / realign gate posts<br>• fully guarding barrier mechanisms |

## ANNEX C – ALCRM RISK SCORE EXPLANATION

ALCRM provides an estimate of both the individual and collective risks at a level crossing.

The individual and collective risk is expressed in Fatalities and Weighted Injuries (FWI). The following values help to explain this:

- **1** = 1 fatality per year or 10 major injuries or 200 minor RIDDOR events or 1000 minor non-RIDDOR events
- **0.1** = 20 minor RIDDOR events or 100 minor non-RIDDOR events
- **0.005** = 5 minor non-RIDDOR events

### INDIVIDUAL RISK

This is the annualised probability of fatality to a 'regular user'. *NOTE: A regular user is taken as a person making a daily return trip over the crossing; assumed 500 traverses per year.*

Individual risk:

- Applies only to crossing users. It is not used for train staff and passengers
- Does not increase with the number of users.
- Is presented as a simplified ranking:
    - Allocates individual risk into rankings A to M
      (A is highest, L is lowest, and M is 'zero risk' e.g. temporary closed, dormant or crossings on mothballed lines)
    - Allows comparison of individual risk to average users across any crossings on the network

| Individual Risk Ranking | Upper Value (Probability) | Lower Value (Probability) | Upper Value (FWI) | Lower Value (FW) |
|---|---|---|---|---|
| A | 1 in 1 | Greater than 1 in 1,000 | 1 | 0.001000000 |
| B | 1 in 1,000 | 1 in 5,000 | 0.001000000 | 0.000200000 |
| C | 1 in 5,000 | 1 in 25,000 | 0.000200000 | 0.000040000 |
| D | 1 in 25,000 | 1 in 125,000 | 0.000040000 | 0.000008000 |
| E | 1 in 125,000 | 1 in 250,000 | 0.000008000 | 0.000004000 |
| F | 1 in 250,000 | 1 in 500,000 | 0.000004000 | 0.000002000 |
| G | 1 in 500,000 | 1 in 1,000,000 | 0.000002000 | 0.000001000 |
| H | 1 in 1,000,000 | 1 in 2,000,000 | 0.000001000 | 0.000000500 |
| I | 1 in 2,000,000 | 1 in 4,000,000 | 0.000000500 | 0.000000250 |
| J | 1 in 4,000,000 | 1 in 10,000,000 | 0.000000250 | 0.000000100 |
| K | 1 in 10,000,000 | 1 in 20,000,000 | 0.000000100 | 0.000000050 |
| L | Less than 1 in 20,000,000 | Greater than 0 | 0.000000050 | Greater than 0 |
| M | 0 | 0 | 0 | 0 |

**COLLECTIVE RISK**
This is the total risk for the crossing and includes the risk to users (pedestrian and vehicle), train staff and passengers.

Collective risk:

- Is presented as a simplified ranking:
  - Allocates collective risk into rankings 1 to 13
    (1 is highest, 12 is lowest, and 13 is 'zero risk' e.g. temporary closed, dormant or crossings on mothballed lines)
  - Can easily compare collective risk between any two crossings on the network

| Collective Risk Ranking | Upper Value (FWI) | Lower Value (FW) |
|---|---|---|
| 1 | Theoretically infinite | Greater than 5.00E-02 |
| 2 | 0.050000000 | 0.010000000 |
| 3 | 0.010000000 | 0.005000000 |
| 4 | 0.005000000 | 0.001000000 |
| 5 | 0.001000000 | 0.000500000 |
| 6 | 0.000500000 | 0.000100000 |
| 7 | 0.000100000 | 0.000050000 |
| 8 | 0.000050000 | 0.000010000 |
| 9 | 0.000010000 | 0.000005000 |
| 10 | 0.000005000 | 0.000001000 |
| 11 | 0.000001000 | 0.000000500 |
| 12 | 0.0000005 | 0 |
| 13 | 0.00E+00 | 0.00E+00 |

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# Public Rights of Way

# Level Crossings on the Rail Network

## Memorandum of Understanding between Network Rail, ADEPT, LGA & IPROW.

## Introduction

This Memorandum of Understanding has been developed by a working group of representatives from Network Rail (who deal with Level Crossings), the Association of Directors of Environment, Economy, Planning & Transport - Rights of Way Managers' Group (ADEPT), the Institute of Public Rights of Way and Access Management (IPROW) and the Local Government Association (LGA). The aim is to improve working practices between Network Rail and Local Highway Authorities (LHAs) where Public Rights of Way (PRoW) use level crossings on the rail network in England and Wales.

It is not intended for this Memorandum of Understanding to be legally binding. This document contains high level principles aimed at encouraging clearer communication and building collaborative relationships between Network Rail and LHAs. This will encourage the most effective dialogue when changes are proposed to a level crossing which affects a PRoW.

This is an important step towards working together to ensure that users remain safe when using the PRoW network in England and Wales.

This Memorandum of Understanding may evolve over time as the working relationship between Network Rail, ADEPT and IPRoW develops. It does not detail any agreed processes; these will be set out in future documentation.

## Scope of the Document

This document covers all of the interactions that Network Rail has when dealing with Public Rights of Way and Level Crossings and includes temporary works (including emergency closures) as well as longer term proposals such as bridge works, permanent closures, diversions and downgrades.

This document will evolve to reflect the work that is currently proposed. A work program will continue between ADEPT / IPRoW / LGA / Network Rail to identify examples of best practice, where there are areas for improvement and to encourage greater understanding of processes, which will be reflected in the following outputs: -

1. Where PRoW level crossings are affected, Network Rail will integrate PRoW legislation and processes alongside its project management tool (GRIP). This includes an ongoing dialogue about the processes used for the closure or diversion of PRoW and how the GRIP tool can be best adapted to take into account of the various factors, including timescales.
2. The production of further documents may be appropriate to encourage best practice when dealing with emergency or temporary closures.
3. IPRoW and ADEPT will use best endeavours to promote best practice and consistency amongst LHAs.

# Memorandum of Understanding (MoU)

## 1. MoU Objectives

1.1 To promote safety at level crossings

1.2 To ensure effective communications and working partnerships between Network Rail and LHAs

1.3 To encourage a consistent approach to managing PRoW level crossings.

## 2. Principles

2.1 Network Rail is a safety critical organisation and keeping people safe on the railway is at the heart of everything it does.

2.2 LHAs duties are to assert and protect the rights of the public to use and enjoy the PRoW network.

2.3 The over-riding objective of this MoU is to acknowledge and bring each other's varying duties, responsibilities and interests together, where sometimes they can be seen to be in conflict, and try to resolve that conflict.

## 3. Communication between Network Rail and LHAs

3.1 Network Rail and LHAs will examine the best course of action given the constraints available when examining options for the future of any level crossing and will discuss as appropriate. Network Rail and LHAs will work together, acknowledging that each has different areas of expertise. Network Rail has the experience and understanding of the interface between railway operations and level crossing safety. LHAs are better placed to understand the impact of the crossing on the wider PRoW network.

3.2 Network Rail recognises the knowledge and expertise of LHAs regarding the PRoW network and will consult with the LHA at the earliest appropriate opportunity. Network Rail retains the discretion to decide how it ultimately approaches level crossings.

3.3 A range of meetings are available to discuss PRoW issues, such as the Network Rail Level Crossing Strategy Group, Road-Rail Partnership Group meetings, ADEPT regional meetings and local level public consultations, and involvement with these is encouraged.

3.4 Network Rail and LHAs will continue to work together to identify the best methods of communication to promote continuous improvement.

3.5 LHAs will inform Network Rail of any issues that arise in addressing an application submitted by Network Rail, including any further information required, as soon as is reasonably practicable.

3.6 Network Rail will investigate any perceived concerns brought to its attention and attempt to address them to the best of its ability.

3.7 ADEPT and IPRoW will encourage PRoW staff and managers improve understanding of level crossing processes and to form working relationships with local Level Crossing Managers / Liability Negotiation Advisers within Network Rail.

3.8 Network Rail will seek to broaden the understanding of those in the Rights of Way profession, in relation to the current means of risk assessing Level Crossings.

3.9 ADEPT / IPRoW will seek to broaden the understanding of PRoW legislation of relevant Network Rail staff where this is required.

3.10 LHAs will expect Network Rail employees involved in schemes which affect the closure of level crossings to engage with its Liability Negotiations Team.

3.11 In line with Network Rail's responsibility for the safe operation of the railway, where it identifies that a level crossing poses an urgent safety risk to the public and requests a temporary emergency closure, the LHA will give a high priority to engaging with and responding to Network Rail.

3.12 For all other level crossing applications, the LHA will prioritise accordingly based on the evidence supplied and will explain the reasons behind any decisions taken.

## 4. Level Crossings and Public Rights of Way Changes

4.1 Where there is a need to make changes to the PRoW network, both LHAs and Network Rail agree that: -

a) The correct application forms will be used for any application. Information will be provided in a clear and concise format which meets the legal requirements for such an application.

b) Network Rail will develop its own internal checklist for improving evidence it provides in support of applications.

c) Where LHAs identify areas where further information is required, the nature and reason for the information will be communicated as early as possible. Network Rail will provide additional information, where possible, and engage with the LHA to resolve any issues that are raised.

d) Although this MoU does not apply to private rights, when dealing with private crossings or bridges, Network Rail will engage with LHAs to establish if there are pre-existing PRoW over crossings under consideration.

e) Meetings between Network Rail and the LHA Rights of Way Officer will be scheduled as appropriate and continue throughout the process as necessary, with the aim of resolving highlighted issues and monitoring progress.

4.2 It is recognised that each level crossing will have many factors that need to be considered, of which PRoW will be one aspect. There may be a number of options available and, although Network Rail will consider the views of the LHA, it is recognised that Network Rail may consider a different option as the most appropriate course of action.

4.3 Where the public are being displaced onto the local highway network, Network Rail and LHAs should properly assess the alternative proposed road routes with a full road safety audit (RSA) assessment, commissioned by the LHA and funded at Network Rail's expense.

4.4 Network Rail has responsibilities for safe railway operations and applications under sections 118A and 119A of the Highways Act 1980 are promoted by Network Rail on public safety grounds. All safety related applications should be progressed as promptly as possible by a LHA and Network Rail will assist, where practicable.

4.5 It is recognised that the statutory test applied by the LHA to make an extinguishment or diversion Order under the Highways Act 1980 is, primarily, expediency and the making of an Order is at its discretion.

4.6 If the decision of the LHA is that it will not progress an application it will inform Network Rail at the earliest opportunity, providing reasons for its decision. If the LHA does not progress the application Network Rail reserves the right to apply to the Secretary of State in accordance with s120 of the Highways Act 1980.

4.7 Network Rail will engage with LHAs on a case by case basis with a view to reaching a decision establishing responsibility for the maintenance of highway surfaces on structures that replace level crossings (as appropriate to the legislation).

4.8 Where Network Rail is considering the use of Transport and Works Act powers it will inform the LHA(s) of this as soon as possible along with the reasons for this decision.

## 5. Pre-Application Consultation

5.1 Network Rail is conscious of ensuring that the public has the opportunity to input into the proposals it makes for changes to level crossings and PRoW, and will carry out pre-feasibility consultation work wherever possible. This can include consultation with stakeholders, discussions with the LHA, obtaining permission and public meetings, etc.

## 6. Confidentiality

6.1 Network Rail may ask any LHA in an individual case to keep some information regarding changes to crossings confidential. If this is the case then Network Rail staff need to make this clear from the outset.

## 7. The Information Acts

7.1 With regard to the ongoing discussions and meetings of the Working Group all parties acknowledge that:

(a) There may be requests through the Freedom of Information Act 2000 and/or the Environmental Information Regulations 2004 (collectively, the **Information Acts**), to disclose information relating to the subject matter of this Memorandum of understanding; and

(b) Notwithstanding any other provision in this Memorandum of Understanding, Network Rail shall be responsible for determining in its absolute discretion whether any information is exempt from disclosure in accordance with the Information Acts.

7.2 ADEPT and IPRoW shall provide all necessary assistance and cooperation as reasonably requested by Network Rail to enable it to comply with its obligations under the Information Acts.

**For:**

**Network Rail Infrastructure Limited**

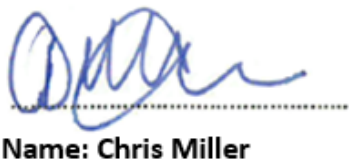
……

**Name: Andrew Haines**
**Title: Chief Executive**

**ADEPT**

Name: Mike Ashworth
Title: Chair, Transport Board

**IPRoW**



**Name: Chris Miller**
**Title: President**