

TRANSPORT AND WORKS ACT 1992

**TRANSPORT AND WORKS (INQUIRIES
PROCEDURE) RULES 2004**

**THE NETWORK RAIL
(CAMBRIDGESHIRE
LEVEL CROSSING REDUCTION)
ORDER**

PROOF OF EVIDENCE

-OF-

SUSAN TILBROOK

Document Reference	NR32/1
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1 PROW Project Level Proof

1.1 Qualifications/experience

- 1.1.1 I am Susan Tilbrook, a Projects Director with Mott MacDonald, which is a major engineering, management and development consultancy. Mott MacDonald is one of the largest firms of consulting engineers and environmental specialists in the UK and employs in excess of 16,000 staff. We have a strong track record of helping to deliver transport projects in the highways and rail sectors.
- 1.1.2 My qualifications include a BEng(hons) in Civil and Structural Engineering from the University of Sheffield and I am a member of the Chartered Institution of Highways and Transportation.
- 1.1.3 I have 28 years' experience in the planning, design and construction of transport infrastructure projects. This has included working in the highways team of a Local Authority for 10 years and within the Road Safety team of the same Local Authority for 2 years. During this time I was responsible for designing and supervising the construction of new highways, the design of major and minor highway improvements and road safety schemes. I also carried out Road Safety Audits as part of my role within the Road Safety team. For the past 16 years I have worked for Mott MacDonald on many major transport projects through the various stages of project development including feasibility, planning and approvals, detailed design and construction. Projects have included A4146 Stoke Hammond Bypass, The Great Yorkshire Way, East Coast Main Line (ECML) Level Crossing Closure Project (Northern Section).
- 1.1.4 The ECML Level Crossing Closure Project (Northern Section) was a project to consider the feasibility of the closure 36 railway level crossings in three local authority areas (Lincolnshire, Nottinghamshire and Doncaster) and to develop preferred solutions for the provision of alternative means of access, which could be taken forward under a Transport and Works Act Order application. I led the development of the technical design from option identification through to selection of the preferred solution in consultation with multiple local authorities. Proposed infrastructure on the project included a highway underpass, several highway bridges and ramped footbridges, new lengths of highway with junction improvements and traffic management, as well as public right of way diversions. The work also involved the preparation of information for and attendance at public consultation events. The project failed to secure funding to progress it beyond selection of the preferred options, however, the work carried out provided Network Rail with a good understanding of the likely issues and level of works required to close level crossings of the nature included within that project.
- 1.1.5 I am Mott MacDonald's design lead for our inputs to the Anglia Level Crossings Reduction project ("the project") and am the designated Contractor's Engineering Manager (CEM) for the project, which means that I have overall accountability for all engineering activities included within Mott MacDonald's scope of work on this project. Mott MacDonald's role on the project has included:
- a. Development and assessment of options for alternative rights of way required in order to close level crossings
 - b. Diversity Impact Assessments (DIA)
 - c. Environmental assessments
 - d. Public and stakeholder consultation

1.1.6 My evidence will primarily address (a) above. I also make reference to points (b) to (d) where relevant, although I would note that I am not an expert witness on environmental or DIA assessments (those assessments were carried out by other teams within Mott MacDonald), and that public and stakeholder consultation is addressed in more detail in the Proofs of Evidence of Andrew Kenning and Jonathan Smith.

1.1.7 I have been involved with the Anglia Level Crossings Closure Project since 2015 when our first commission commenced. Our involvement with the project has continued through until present day with a short 2 month break between commissions in early 2016. I therefore have a close understanding of the how and why the alternative routes have developed into the final TWAO proposals and the constraints, considerations and views that have been taken into account during the process.

1.2 Overview

1.2.1 My evidence concerns the development of proposed alternatives for each crossing and I will first set out the general approach to option identification and assessment together with reference to relevant standards and guidance. I will then address the following on a crossing by crossing basis:

- a. Purpose and characteristics of the route being closed, extinguished or amended
- b. Selection of alternative of the diversionary route or rights
- c. Any alternatives considered
- d. How the alternative or diversionary route fulfils the purpose of the original route and the relationship to the wider PROW network (where applicable)
- e. If route includes road walking, how safe that route is and any necessary mitigation measures proposed
- f. Engagement with the local Highway Authority (HA) and any changes made in response to HA comments or other consultation responses
- g. Consideration of any alternatives proposed by objectors to the Order
- h. Whether the proposed route is suitable and convenient

1.3 General Approach

1.3.1 These proposals have been made as part of a Transport and Works Act Order Application.

1.3.2 Section 5(6) of the Transport and Works Act states that an order shall not extinguish a public right of way over land unless the Secretary of State is satisfied that an alternative right of way has been or will be provided, or that one is not required. Although there is no definition of 'required' in the Act itself, the DfT Guide to TWA Procedures states that if an alternative is to be provided, the Secretary of State would wish to be satisfied that it will be a convenient and suitable replacement for existing users. This is the basis on which alternative routes have been identified and assessed.

1.3.3 It should be noted that this is not an application under the Highways Act 1980, under which any proposed diversion must be suitable and it must also take into account 'public enjoyment of the footpath as a whole'. This is a different statutory test to that under s.5(6) of the Transport and Works Act 1992.

1.4 The Strategy

- 1.4.1 The Anglia Level Crossing Reduction Strategy (The Strategy) comprises five phases; however, the application and Mott MacDonald's commission only relates to Phases 1 and 2. The Strategy is set out in core document **NR18**; Client Requirements Document Anglia CP5 Level Crossing Reduction Strategy
- 1.4.2 Phase 1 (mainline) and 2 (branch line) comprise level crossings where the proposals are located in the vicinity of an existing alternative means of crossing the railway, do not require any new form of grade separation across the railway, and where benefits may be deliverable and affordable within Network Rail Control Period 5 (to 31/3/19) and Control Period 6 (to 31/03/2024). Network Rail specified within Route Requirement Documents (RRD)¹ that circa 230 level crossings should be considered within the Phase 1 and 2 GRIP Stage 1 concept feasibility study.
- 1.4.3 Phases 3 to 5 include new grade separated crossings of the railway, and diversion or downgrading of major highways. These phases will require more substantive associated infrastructure and this means that they will take longer to develop and secure the necessary funding. Level crossings within Phase 3, 4 and 5 of The Strategy are not included within the application.
- 1.4.4 The background to the Strategy and further explanation for its rationale is addressed by Mark Brunnen and Eliane Algaard in their evidence, documents **NR27/1** and **NR28/1**

1.5 Option Identification and Development

- 1.5.1 Network Rail identified concept solutions for Phase 1 and 2 of The Strategy in early 2015. Mott MacDonald was commissioned to review the feasibility of the concept solutions and make recommendations for alternatives that should be considered. This work was carried out between August 2015 and February 2016. In August 2015, the number of level crossings by County (or Unitary Authority) under study were: Norfolk x 41, Suffolk x 31, Essex x 56, Cambridgeshire x 35, Thurrock x 3, Hertfordshire x 9 and Havering x 4. After considering the GRIP Stage 1 feasibility study outcomes and reviewing funding, Network Rail reduced the number of Phase 1 and 2 level crossings to be taken forward into the next stage of the project. Norfolk and certain Suffolk level crossings were not progressed as part of the project due to the funding available.
- 1.5.2 In April 2016 Mott MacDonald was commissioned to develop the concept solutions into preliminary designs for the crossings to be taken forward within Phase 1 and 2 and to carry out the necessary assessment work determine if they were a convenient and suitable replacement for existing users.
- 1.5.3 During the development work, other level crossings were withdrawn from the scheme by Network Rail due to technical issues, third party consideration or affordability reasons. The decision-making process is dealt with by Mr Andrew Kenning in his Proof of Evidence, **NR30/1**

1.6 Assessment of Concept Solutions

- 1.6.1 In order to assess the feasibility of the concept solutions and identify alternative options the following factors were considered:
 - a. Changes to rights of way and crossing rights
 - b. Level Crossing information

¹ A copy of the RRDs for Cambridgeshire is appended to Andrew Kenning's Proof of Evidence NR30/2 at Tab 1

- c. Diversity Impact Assessment (DIA)
- d. Land Ownership and use
- e. Safety
- f. Environmental issues
- g. Costing of the proposals and maintenance liability
- h. Stakeholder consultation

- 1.6.2 The project team visited each level crossing where access was available. Site observations were generally made from publicly accessible land and no railway lineside access was permitted.
- 1.6.3 Baseline data regarding each crossing was provided by Network Rail which gave details about the physical infrastructure at the crossing, how it currently operates and the rights over it, line speeds, usage data and the current level crossing risk assessment details.
- 1.6.4 The project team considered the proposed amendments to the rights at the crossing and what rights the alternative route would need to accommodate. For example, would the route need to accommodate pedestrians, equestrians or vehicles etc. Our assessment also included consideration of the proposed alternative route within the overall network of public rights of way, existing highways and where appropriate private means of access. The availability and condition of existing features within the existing highway network such as bridges, footways and verges was considered.
- 1.6.5 In order for Network Rail to meet their Public Sector equality duty under the Equality Act, a DIA scoping exercise was undertaken by Mott MacDonald 's DIA specialist to provide a preliminary assessment of the likely impact that closure of each level crossing may have on their surrounding communities and additionally determine which of the level crossings may require a full DIA. I will describe the DIA process in section 1.16 of my Poof of Evidence. This exercise informed the assessment work to determine if the viability of the concept solution could be affected, and if an alternative option existed that might be more appropriate.
- 1.6.6 Land ownership details were acquired for land parcels in the vicinity of the proposals to identify the likely impact on private landowners and to understand if land ownership and use may affect the viability of the concept solution.
- 1.6.7 Safety and security on the proposed alternative routes was considered. This assessment included consideration of personal security in the new environment and also road safety where the new routes would interface with both public and private roads.
- 1.6.8 The need to carry out a road safety audit (RSA) was considered for each concept solution by a road safety specialist within the Mott MacDonald design team. Crossings where alternative routes interfaced with public highways were assessed to determine if a RSA was required to confirm the viability of taking the concept solution forwards. This assessment included consideration of existing pedestrian and other non motorised user facilities on the highway, category and nature of the road, and the posted speed limit. I will describe the RSA process in section 1.15.of my Poof of Evidence.
- 1.6.9 Mott MacDonald undertook a high level environmental desk based study to identify environmental constraints within a 2km radius of each level crossing (the "study area"). These included
- a. Flood risk zones within 500m of study area
 - b. Agricultural land classification within 1km of study area

- c. Watercourses within 10m of study area or, ponds, drainage ditches etc within 500m of study area
- d. Active/historic landfill sites within 500m of study area
- e. Designated statutory sites of nature conservation (e.g. SSSIs, LNRs, AONBs, etc.) within 2km of the study area
- f. Historic and cultural heritage features (e.g. Conservation Areas, Listed Buildings Scheduled Monuments, Registered Parks & Gardens etc.) within 1km of study area
- g. Nearby receptors (e.g. hospitals, schools, residential)
- h. Ancient Woodland, Hedgerows

1.6.10 Using the data gathered from the high level review and observations made during the site visit, potential environmental issues that might affect the viability of the concept solution were identified.

1.6.11 Mott MacDonald supported Network Rail during consultation carried out at this stage of the project with the following key stakeholders:

- a. Cambridgeshire County Council
- b. Historic England
- c. Environment Agency
- d. Natural England
- e. Highways England
- f. Local user groups

1.6.12 Feedback received from consultation with these stakeholders was considered in the assessment of the viability of the proposals and changes that might need to be incorporated into the future development of each crossing proposal.

1.6.13 The concept solutions proposed by Network Rail were assessed by Mott MacDonald as described in paragraphs 1.6.2 to 1.6.12 above and based on the viability of the proposals recommendations were made as follows:

- a. The concept solution is viable and can be taken forward for development.
- b. The concept solution has some areas of concern and an alternative option has been identified that should be progressed in parallel.
- c. The concept solution has some areas of concern and is not suitable for progressing. An alternative solution has been identified that should be progressed.
- d. The concept solution has some areas of concern and is not suitable for progressing. No suitable alternative has been identified and the level crossing closure should be considered in a later phase of the strategy.

1.7 Development of the Proposed Solutions

1.7.1 Following on from the assessment of and recommendations for concept solutions Mott MacDonald were commissioned to develop the proposed solutions to allow the preparation of a Transport and Works Act Order Application. This required the designs to be developed to sufficient detail to establish the rights and any land required to deliver the project. The design proposals, principles and infrastructure components are set out in the Cambridgeshire Design

Guide, core document **NR12**. The infrastructure components described in this document are illustrative and therefore give a good representation of what will be built when the scheme is implemented, but the final works will be subject to detailed design and agreement with the relevant adopting authorities.

1.7.2 As part of the development of the alternative routes for each crossing the following activities were carried out:

- a. Collection of further level crossing census data
- b. Collection of traffic data where appropriate
- c. Support to Network Rail during 2 rounds of public consultation and a further round of public engagement for selected crossings.
- d. Support to Network Rail during consultation with Stakeholders
- e. Assessment of the suitability and convenience of the proposed route
- f. Environmental assessment of the impact of the proposals and preparation of an environmental screening request
- g. An appraisal of the options considered for each level crossing closure proposal.
- h. Outline design of infrastructure requirements
- i. Road Safety Audits
- j. Diversity Impact Assessments

1.7.3 I describe these activities in more detail in sections 1.8 to 1.16

1.8 Census and Traffic Surveys

1.8.1 The project team arranged for the collection of further level crossing census data to help understand how each crossing was used. The census surveys were commissioned to take place for a period of nine days which were to include two weekends with 24 hours of footage being recorded each day. The surveys were specified to be in accordance with Network Rail standard GRD007 which is used nationwide by Network Rail. This document outlines a standard form of data collection which provides information that can be used to monitor and assess operations at each crossing. Several additions were made to the standard GRD specification to reflect the nature of the individual crossings being considered, with pedestrian use class being expanded to capture additional detail regarding the nature of pedestrians and cyclists using the crossings. The following classifications of users were recorded:

- a. Pedestrian census
 - i. Adult pedestrians;
 - ii. Accompanied children;
 - iii. Unaccompanied children;
 - iv. Elderly pedestrians;
 - v. Physically impaired pedestrians;
 - vi. Pedestrians with a pram/pushchair; and
 - vii. Pedestrians on a mobility scooter.
- b. Vehicle census
 - i. Cars;
 - ii. Light Goods Vehicles;
 - iii. Motor cycles;

- iv. Heavy Goods Vehicles;
- v. Agricultural vehicles (tractors/vehicles with trailers);
- vi. Buses;
- vii. Equestrians;
- viii. Pedal Cycles; and
- ix. Herded animals.

- 1.8.2 The DfT's Transport Assessment Guidance outlines that highway surveys should be carried out in a neutral month, making specific reference to late March and April, May, June, September, October and November. It was considered that in order to record the maximum likely usage, June or early July would be the most appropriate period to undertake the surveys as it was outside of the school holiday periods but with better than average weather conditions and longer daylight hours, which typically encourage greater use of public rights of way.
- 1.8.3 The census survey results formed part of the information that was assessed to give the design team an understanding of the numbers and purpose of usage of each level crossing, along with consultation and stakeholder engagement feedback, and a review of the wider network and environment. The actual number of users recorded was taken as a guide to the likely level of usage but not used as a definitive figure for numbers of people using each crossing. We were also informed by local authorities and user groups that walking events may not have been picked up in the surveys. The Census survey data can be found in core document **NR25**. It should be noted that the census survey data for sites C12, C13 and C27 has been updated and can be found appended to my Proof of Evidence, document **NR32/2 at Tab 14**.
- 1.8.4 Automatic Traffic Count (ATC) surveys were also commissioned to take place on certain diversion routes for a period of nine days, again to include two weekends, with 24 hours of data to be recorded each day. These surveys were used to help understand the volume, composition and speed of traffic on diversionary routes and how that might impact of the use of the route by PROW users. The ATC survey data can be found appended to my Proof of Evidence, document **NR32/2 at Tab 1**.
- 1.8.5 I will give details of the results of the census surveys, and ATC surveys where relevant, in each of my crossing specific evidence in section 2.
- 1.8.6 Additional traffic surveys were carried out at C31 Littleport Station in order to undertake an assessment of the impact on traffic movements due to the proposed changes to the highway layout in this location. Further details are given in Section 2.23.

1.9 Public Consultation

- 1.9.1 Mott MacDonald supported Network Rail through two rounds of public consultation and a one further public information exercise for crossings where there were some late changes to the proposals. Our role included the following activities:
- a. Preparation of documentation and plans to show the scheme proposals
 - b. Attendance at public consultation events
 - c. Analysis of feedback
- 1.9.2 Details of the Public Consultation activities held as part of the project are set out in the Statement of Consultation, core document **NR05**. The public consultation process is dealt with by Mr Andrew Kenning in his Proof of Evidence, document number **NR30/1**.

1.9.3 The public consultation events provided an opportunity to explain the proposals to members of the public who attended the events. The scheme information was also available on Network Rail's website.

1.9.4 Members of the public who attended the events were invited to provide feedback via a questionnaire at each round of consultation. Members of the public were also able to provide feedback by email or letter. The feedback was used to help the design team understand how the existing crossings and routes were used, views on the proposals, concerns of users and if there were any other suggested proposals that should be considered. The questionnaire was also available as a web based form that could be completed online. Copies of the questionnaires are appended to the Proof of Evidence of Mr Andrew Kenning, document **NR30/2 at Tabs 4 and 5**.

1.9.5 The first round of Public Consultation was held in June 2016 and the second round in September 2016. The consultation process allowed feedback to be taken on board in the development of the options and finalising the proposals to be submitted within the Order.

1.10 Stakeholder Engagement

1.10.1 The project team also consulted with key stakeholders regarding the project. These included the following organisations:

- a. Cambridge County Council
- b. District, Parish and Community Councils
- c. Members of Parliament
- d. Schedules 5 and 6 consultees
- e. Landowners
- f. Local user and interest groups

1.10.2 The consultation information was issued to the relevant Highway and Planning Authorities in advance of each round of public consultation. Representatives from Cambridgeshire County Council (CCC) attended the public consultation events. Workshops or teleconferences were held with technical officers from CCC in their role as the Highway Authority (including representatives from the PROW and highway teams) following each round of consultation. Minutes from each workshop or teleconference are appended to my Proof of Evidence, document **NR32/2 at Tab 5**.

1.10.3 The Highway Authority meetings were used to gain an understanding of the acceptability of the proposals to Cambridgeshire County Council and any mitigation measures considered necessary by their officers. The PROW officers were able to share their knowledge of the PROW network in the vicinity of the proposals and the principles of definitive widths, infrastructure requirements and maintenance considerations were discussed with the design team.

1.10.4 Feedback from the other consultees and landowners was considered in the assessment of the overall acceptability of the proposals.

1.10.5 Landowner engagement is specifically dealt with by Mr Jonathan Smith in his Proof of Evidence, **NR29/1**.

1.11 Suitability and Convenience of the Proposed Route

- 1.11.1 Further to the assessment work carried out on the concept solutions, additional data from surveys, public consultation, stakeholder engagement and a study of the existing PROW network was used to gain a better understanding of the level and purpose of use of the routes that would be affected by the level crossing closures.
- 1.11.2 The design team assessed how the proposed diversion route would fit into the wider network considering:
- a. Access to services
 - b. Local walks and circular routes
 - c. Long distance routes
 - d. Gaps in the existing off-road PROW network
- 1.11.3 When assessing the diversion route, the design team considered the features of the diversion route as follows:
- a. Use of existing footpaths and footways
 - b. Provision of off road Public Rights of Way
 - i. Field edge
 - ii. Cross field
 - c. Use of continuous highway verges - suitability of verge width and maintenance requirements
 - d. Use of partial highway verges
 - e. Use of rural carriageway, no suitable verges
 - f. Necessary infrastructure works
- 1.11.4 Where Network Rail structures were proposed as a means of crossing the railway, as built or inspection data was provided by Network Rail to help the design team understand any potential restrictions on loading, headroom or width. More detailed studies were undertaken at existing road bridges to assess the feasibility of improving facilities for pedestrians where necessary.
- 1.11.5 In addition to advice given by Cambridgeshire County Council as the Local Highway Authority regarding their requirements for the design of PROWS, the design team also referenced the following design guidance when considering the suitability of the route:
- a. Design Manual for Roads and Bridges
 - i. TD 9/93 - Highway Link Design
 - ii. TD 27/05 - Cross-Sections and Headrooms
 - iii. TA 90/05 - The Geometric Design of Pedestrian, Cycle and Equestrian Routes
 - iv. TD 36/93 - Subways for Pedestrians and Pedal Cyclists Layout and Dimensions
 - v. HD 19/15 - Road Safety Audit
 - vi. BD 29/04 - Design Criteria for Footbridges
 - b. Department for Transport 2005: Inclusive mobility. A guide to best practice on access to pedestrian and transport infrastructure
 - c. Department for Transport: Local Transport Note LTN 1/04 - Policy, Planning and Design for Walking and Cycling
 - d. Department for Transport: Manual for Streets

e. Chartered Institution of Highways and Transportation: Manual for Streets 2

- 1.11.6 Network Rail's proposals generally provide for alternative public rights of way in place of those crossing the railway. In some cases, the proposals enhance the local prowl network. The alternative public rights of way proposed must, under the Order, be completed to the Highway Authority's reasonable satisfaction. As such they are also broadly in line with the Cambridgeshire County Council Rights of Way Improvement Plan (ROWIP), the Council's strategy for improving access to the countryside through rights of way. The main objective of the ROWIP is 'to manage, improve and promote a Public Rights of Way network as an integral part of a wider transport system which meets the needs of the whole community for safe sustainable local transport, which improves public health, enhances biodiversity, increases recreational opportunities and contributes to the rural economy'.
- 1.11.7 In order to assist with the understanding of the wider PROW network I have appended wider OS mapping to my Proof of Evidence, **NR32/2 at Tab 9**.
- 1.11.8 I will discuss how each level crossing proposal provides a suitable and convenient alternative in my crossing specific evidence in section 2.

1.12 Environmental assessment

- 1.12.1 In order for the Secretary of State to determine if the proposed works under the Network Rail (Cambridge Level Crossing Reduction) Order would be likely to have significant effects on the environment during construction or operation, a high level assessment was carried out to allow an Environmental Impact Assessment (EIA) Screening Request to be submitted to DfT on 9 December 2016 with supporting information, in accordance with Rule 7 of the Transport and Works (Applications and Objections Procedure)(England and Wales) Rules 2006.
- 1.12.2 The assessment considered the characteristics of the project having regard, in particular, to; the size, nature and location of the project, the cumulation with other projects, the use of natural resources, the production of waste, pollution and nuisances and the risk of accidents. It was assumed that all construction contractors would be obliged to comply with Network Rail's environmental contract requirements and they will be required to produce a contractor's construction environment management plan prior to commencing any physical works and to comply with any relevant legislation.
- 1.12.3 The following environmental topics were considered in relation to the proposals to close or downgrade level crossings and provide diversionary routes:
- a. Ecology;
 - b. Landscape;
 - c. Historic environment;
 - d. Ground conditions;
 - e. Water resources;
 - f. Traffic and transport;
 - g. Noise;
 - h. Air quality; and
 - i. Socio-economics and community.

This process is further outlined in the Environment note appended to my Proof of Evidence, **NR32/2 at Tab 8**.

- 1.12.4 The assessment concluded that no potential significant environmental effects were likely during construction or operation of the proposed works. Therefore, for the scheme as a whole, it was considered that an EIA would not be required in support of the order application, due to the size, nature and location of the works.
- 1.12.5 On 24th January 2017 the Secretary of State issued a screening decision which confirmed that the project would be unlikely to have a significant effect on the environment and that an Environmental Impact Assessment was not required to support the Network Rail (Cambridge Level Crossing Reduction) Order. The Screening Decision letter can be found in core document NR11.
- 1.12.6 Notwithstanding the Screening Decision, as is normal for a Transport and Works Act Order application, Network Rail has also made a request to the Secretary of State for deemed planning permission for the development authorised by the draft Order (NR10). The permission requested is intended to be granted subject to conditions relevant to the works proposed which provide certain environmental controls. These include conditions to limit working hours, to protect nesting birds during the bird nesting season, to require a plan to describe procedures if protected species are unexpectedly discovered during the works, and to require an archaeological scheme to identify any location where a watching brief is required during construction and procedures if significant archaeological remains are found. The plans are to be approved by the local planning authority in writing before works commence and it will be for the local planning authority to enforce the planning conditions.

1.13 Appraisal of Options

- 1.13.1 In order to demonstrate consistency throughout the assessment process and to show that all options were considered objectively, they were appraised under the headings considered in the Department for Transport's Transport Analysis Guidance (WebTAG) using the New Approach to Transport Appraisal (NATA) methodology. The guidance identifies the need to undertake appraisal in a proportionate manner and enabling a lighter touch approach, where appropriate.
- 1.13.2 The guidance provides a framework for assessing schemes against the Government's objectives for transport namely:
- a. Economy,
 - b. Environmental,
 - c. Social,
 - d. Public Accounts
- 1.13.3 In addition, as the TWAO places a requirement on the Promoter of a TWAO scheme to undertake consultation, it was considered that there was a requirement and a benefit to include assessment of the results of the Public Consultation exercise, so that the option acceptability could be considered as an objective in the wider appraisal.
- 1.13.4 In order to ensure that the options developed for each level crossing were assessed in a consistent way, considering the above objectives, an Appraisal Summary Table (AST) was developed in which the assessment could be recorded and comparative benefits and adverse impacts could be seen. A template of the AST is appended to my Proof of Evidence, document **NR32/2 at Tab 6**.
- 1.13.5 The ASTs for the initial stage were assessed at a high level and only considered objectives based on the information available at the time of the studies. They were completed to a level of detail commensurate with the concept/outline nature of the options development.

- 1.13.6 Options were appraised against the above objectives, and if sufficient information was available, they were also scored against their associated sub-categories using the matrix shown below using the assessment criteria provided. It should be noted that the scoring matrix is a comparative scale used to differentiate options and does not necessarily imply detrimental impacts.

Adverse	Slight Adverse	Neutral	Slight Benefit	Benefit
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- 1.13.7 The ASTs were used to assist NR with their decision making process for selection of the alternative routes to take forward for development and in the order application following each round of public consultation.

1.14 Outline design of infrastructure requirements

- 1.14.1 The level of design necessary at this stage of the project is to be able to give users and stakeholders a good understanding of the proposals and to carry out the following assessment work:
- Feasibility of the proposals
 - Requirements for land and rights
 - The environmental impacts
 - An estimate of the cost of implementation
- 1.14.2 The design team discussed design principles and standard details with Cambridgeshire County Council in their role as the Highway Authority and then used this information to develop a Design Guide for the crossing proposals in the Network Rail (Cambridgeshire) Order, core document **NR12**.
- 1.14.3 2m wide footpaths are, in general, proposed for footpath diversions in line with Cambridgeshire County Council's Highway Infrastructure Asset Management Plan 2017 – 2027, Appendix VIII - Adoption of Non-Motorised User (NMTU) Routes. Where the proposals vary from this width at any particular level crossing solution, I describe the details and rationale in my crossing specific evidence.
- 1.14.4 3m wide bridleways are proposed for bridleway diversions, which although does not accord with the Council's Highway Infrastructure Asset Management plan referred to in 1.14.3 above (a requirement for 4m wide bridleway diversions), is in line with current design guidance. The Design Manual for Roads and Bridges, TA 90/05 - The Geometric Design of Pedestrian, Cycle and Equestrian Routes states in section 7.11 that Ridden horses can occupy a width of around 1.5m, and a surfaced width of 2.0m should be provided as a minimum to accommodate this. Where horses are expected to pass, a minimum width of 3.0m should be provided.
- 1.14.5 The proposed 3m width for bridleway diversions is consistent with the provision of new bridleways across all counties within the Anglia Level Crossing Reduction Strategy Project. Cambridgeshire County Council's requirement for 4m wide bridleways cannot be justified as Network Rail has also had regard to Government Guidance on Compulsory Purchase process and the general principle that acquisition of land or rights in land should only be used where there is a compelling case in the public interest. Many of the existing bridleways within Cambridgeshire are under 4m wide and it is not the purpose of this project to enhance the current provision.
- 1.14.6 Volume 1 of the design guide describes the design principles and infrastructure components to be incorporated into the project. The infrastructure components described in this document are

illustrative and therefore give a good representation of what will be built when the scheme is implemented, but the final works will be subject to detailed design and agreement with the relevant adopting authorities.

- 1.14.7 Any level crossings where the proposals require more than the standard infrastructure components are described in more detail and I will discuss this in my crossing specific evidence.
- 1.14.8 Volume 2 of the design guide describes the design freeze proposals and includes drawings for each level crossing closure proposal. The drawings show the proposed diversion routes together with necessary infrastructure components required to make the routes useable.

1.15 Road Safety Audits

- 1.15.1 The Road Safety Audit (RSA) procedure has been developed to ensure that operational road safety experience is applied during the design and construction process in order that the number and severity of collisions is kept to a minimum. Road Safety Auditors identify and address problem areas using the experience gained from highway design, road safety engineering, collision analysis and road safety related research. A Highway Authority's aim is that the Road Safety Audit process will lead to schemes that rarely require road safety related changes after opening.
- 1.15.2 Document HD 19/15, Road Safety Audit, contained within Volume 5 of the Design Manual for Roads and Bridges requires that RSAs are carried out for Highway Improvement Schemes, i.e. all works that involve construction of new highway or permanent change to the existing highway layout or features. This includes changes to road layout, kerbs, signs and road markings, lighting, signalling, drainage, landscaping, communications cabinets and the installation of roadside equipment. HD 19/15 sets out the process for undertaking RSAs.
- 1.15.3 RSAs are carried out at the following stages of highway improvement schemes as follows:
 - a. Stage 1 Road Safety Audit: Completion of Preliminary Design
 - b. Stage 2 Road Safety Audit: Completion of Detailed Design
 - c. Stage 3 Road Safety Audit: Completion of Construction
 - d. Stage 4 Road Safety Audit: Monitoring

The aim of an RSA is to identify potential road safety problems that may affect any users of the highway and to suggest measures to eliminate or mitigate those problems. Whilst many of the proposals on this project do not involve any permanent change to the existing highway layout or features, the RSA process was considered an appropriate assessment methodology to ensure that all roads that form part of a proposed route for use by non-motorised road users (NMUs) were adequately reviewed by road safety professionals. The proposal to carry out RSAs was supported by the Highway Authority.

- 1.15.4 The requirement for a Stage 1 Road Safety Audit (RSA) on an individual level crossing basis was scoped early in the first stage of the project following an initial site visit and during assessment of concept solutions, with those solutions that interfaced with the public highway with a potential for road safety issues prioritised.
- 1.15.5 At the next stage of the project, development of proposed solutions, the requirement for further RSAs was assessed. This was to ensure that all routes that interfaced with the public highway were considered, including those crossings that had already been subject to a RSA but where additional or amended options had been identified.

- 1.15.6 The RSA's at both stages of the project were carried out prior to Personal Injury Collision data, traffic flows and speed data being available. However, the Audit Team did not raise this as a concern and were satisfied that Stage 1 RSAs could be undertaken to highlight any road safety problems for the nature of the proposals planned as part of this project.
- 1.15.7 In line with the process set out in HD 19/15, a Road Safety Audit Brief was prepared by the project team giving instructions to the independent (not involved with preparing the design proposals) Road Safety Audit Team defining the scope and details of the proposals to be audited. Stage 1 RSAs were undertaken for the project as the design proposals are at a preliminary design stage. The brief identified the following factors that may affect road safety:
- a. Non-motorised users (NMUs) are being diverted to alternative level crossings or grade separated crossings where they may be exposed to live traffic by:-
 - i. walking along existing footways;
 - ii. walking in existing grassed verges; or
 - iii. walking in the carriageway on rural roads.
 - b. The interface of NMUs and agricultural vehicles on the PROWs; and
 - c. The access points off the public highway for occasional use by large agricultural vehicles.
- 1.15.8 The Road Safety Audits were carried out by an independent Audit Team within Mott MacDonald. The Road Safety Audit Team comprised two people (a Team Leader and Team Member). Both team members have appropriate training, skills and experience to carry out the role.
- 1.15.9 The Road Safety Audit team visited each location of the proposed diversion routes where they interfaced with the public highway network. Following the site visits a report was produced by the Road Safety Audit Team describing any road safety related problems identified by the Road Safety Audit Team and the recommended solutions to those problems. The reports are contained within core document **NR16**.
- 1.15.10 The design team prepared a Road Safety Audit Response Report, which is contained within core document **NR16**. The report provides a response to the problems and recommendations raised in the Road Safety Audit Report giving details of any changes made to mitigate any issues.
- 1.15.11 RSAs were carried out for 2 further level crossing sites in September 2017. These audits were carried out at previously audited crossings to ensure that late changes during design development were fully considered. Paragraph 2.62 of HD19/15 sets out a mandatory requirement for RSAs to be repeated if the scheme design materially changes, if there are many minor changes which could together impact on road user safety or if the previous finalised Road Safety Audit for the relevant stage is more than 5 years old, therefore it was considered necessary to carry out further audits after deposition. The RSAs carried out since order deposition can be found appended to my Proof of Evidence, document **NR32/2 at Tab 11**. No problems were identified as part of the RSAs carried out for these sites. The Road Safety Audit Response Report has been updated to reflect the additional audits undertaken and this document can be found appended to my Proof of Evidence, document **NR32/2 at Tab 12**.
- 1.15.12 I will describe any particular RSA issues raised during the design process within each relevant crossing specific evidence.

1.16 Diversity Impact Assessments

- 1.16.1 A DIA is a systematic assessment of the likely or actual effects of policies or proposals on social groups with the following protected characteristics (as defined by the Equality Act 2010):

- a. Age, including children aged under 16, younger people aged 16-24, and older people aged 65 and over
- b. Disability, including people with sensory impairments, mobility impairments, learning disabilities, mental wellbeing disabilities, and long term medical conditions
- c. Gender reassignment, including persons who are proposing to undergo, are undergoing, or have undergone gender reassignment
- d. Marriage and civil partnership, with a focus purely on discrimination on the basis of whether someone is married or in a civil partnership – single people are not covered by this characteristic;
- e. Pregnancy and maternity, including pregnant women and nursing mothers
- f. Race and ethnicity, including ethnic or national origins, colour or nationality
- g. Religion or belief, including all religion, faith or belief groups, including lack of belief
- h. Sex, including both women and men
- i. Sexual orientation, including heterosexuals, as well as lesbians, gay men and bisexual people

- 1.16.2 In order to assist Network Rail in complying with their Public Sector equality duty under the Equality Act, a scoping study was carried out at the concept solution review stage to identify potential issues related to the closures and gather evidence on the potential impacts on people with different protected characteristics in order to make an assessment about which crossings required further consideration through a full DIA.
- 1.16.3 This exercise informed the assessment work to determine if the viability of the concept solution could be affected, and if an alternative option existed that might be more appropriate.
- 1.16.4 At the development of the proposed solutions stage an Equality and Diversity overview report was prepared by Mott MacDonald on behalf of Network Rail. The preparation of the DIA overview document included a review of the developed proposals at the level crossing sites within the Cambridgeshire Order to understand the content and proposed changes at each site.
- 1.16.5 A number of full DIAs were carried out following the scoping study and overview. These assessments identified key conclusions and recommendations relating to the proposed level crossing closures within Cambridgeshire Order, and the design team used this information to incorporate any necessary features or mitigation measures into the proposals.
- 1.16.6 I will describe any particular DIA issues raised and how they were mitigated in my crossing specific evidence.

2 Crossing Specific Details

2.1 C01 Chittering, C02 Nairns No. 117, C33 Jack O'Tell and C34 Fysons

- 2.1.1 These four level crossings have been considered together as they share a common closure solution.
- 2.1.2 The approach to the C01 level crossing from the west is via an overgrown and seasonally flooded track, which leads to a stile which has become overgrown and difficult to use. To the east, the path is also overgrown, but the wooden bridge to the level crossing remains accessible on foot. The current route is therefore likely to be unsuitable for users with mobility or visual impairments, and parents with pushchairs or young children.
- 2.1.3 The need for new usage data was identified at Chittering Footpath and a nine-day census survey to be in accordance with Network Rail Standard GRD007 was subsequently commissioned to take place between the 18th and 26th of June 2016 and recorded zero use of the crossing over a 9 day period.
- 2.1.4 Of the 3 people that provided feedback during the first round of public consultation, 2 indicated that they rarely used the crossing and 1 used it daily. Responses indicated that the crossing is mainly used for leisure purposes with 1 person stating that they used it for access to their own property, although it is unclear which property this relates to.
- 2.1.5 Based on the location of the crossing point, usage data and feedback from public consultation it was considered that the Chittering level crossing would provide infrequent leisure access to the local footpath network for a small number of people and potentially some property access. The fact that access to the crossing is very overgrown supports the assessment that it is infrequently used.
- 2.1.6 C02 Nairns No. 117 is approximately 2500m northeast of C01. This private rights level crossing lies on an agricultural track that passes west to east through flat agricultural fields with a few scattered trees and hedges/fencing. On the eastern side of the railway a private track then heads north between Railway Farm and the railway towards the A1123 road.
- 2.1.7 The accessibility of the C02 crossing is limited more by the uneven surface of the approach road than by any detail at the level crossing itself. The surfaces on the level crossing itself are heavy duty boards that provide a relatively smooth pathway. The approach roads however are unpaved, dirt roads that are prone to potholes and other features that make the road uneven and potentially hazardous and inaccessible to those with limited mobility.
- 2.1.8 As Nairns No. 117 is a private user worked crossing, a new census survey was not considered necessary at this location and it was agreed with Network Rail that the Private Users for this level crossing would instead be issued with a questionnaire. This questionnaire sought to capture not only the average use of the level crossing but also whether there were any times of the year when usage peaked, such as during the harvesting season for example. The Private User of Nairns No. 117 indicated that the crossing was used by an average of the following per day:
- 1 adult cyclists and 2 cyclists under 18 years old
 - 2 vans / lorry over 3.5 tonnes
 - 4 single tractors
 - 6 tractors with trailers

- 1 tracked vehicle with/without trailers or large attachment

- 2.1.9 The farm with private rights at this crossing is approximately 2500 acres and the landholding runs parallel to the railway extending to 1.7km, and is roughly split 50% to the east and 50% to the west of the railway. The farm has evolved over recent years and now includes a solar farm, they employ approximately 30 full time staff and up to a further 35 during peak harvest time. The farmer has developed his business around the use of the current crossings, their main farm buildings are positioned between C02 Nairn's and C33 Jack 'O' Tell level crossings. They have constructed a number of service roads across the farm including one which provides direct access to Nairn's crossing.
- 2.1.10 Based on the location of the crossing point and information provided by the private user it was considered that it would mainly provide regular access to private property for a moderate number of farm vehicles and a small number of pedestrians.
- 2.1.11 C33 Jack O'Tell level crossing is approximately 425m northeast of C01 and provides access to farmland on both sides of the railway for private users, and it also provides a route across the railway for existing footpath 16 which links Chittering Drove (approximately 650m west of the level crossing) and Long Drove (approximately 900m east of the level crossing).
- 2.1.12 The accessibility of the level crossing itself is good, with level crossing furniture spanning over the entire railway and crossing gates which are wide and easily opened using a latch. The nature of the approaches is likely to restrict access to some people from protected characteristic groups, particularly those with mobility impairments.
- 2.1.13 As there are no plans to change the status of the public footpath crossing at Jack O'Tell , a new census survey was not considered necessary at this location. It was agreed with Network Rail that the Private Users for this level crossing would instead be issued with a questionnaire. This questionnaire sought to capture not only the average use of the level crossing but also whether there were any times of the year when usage peaked, such as during the harvesting season for example. The Private User of Jack O'Tell indicated that the crossing was used by an average of the following per day:
- 3 adult pedestrians
 - 2 cars
 - 2 single tractors
 - 6 tractors with trailers
 - 1 tracked vehicle with/without trailers or large attachment
- 2.1.14 I have described more detail about the farm that has private rights to use this crossing in paragraph 2.1.9 above.
- 2.1.15 One person provided feedback during the first round of public consultation indicating that they used the crossing on a monthly basis by bicycle.
- 2.1.16 Based on the location of the crossing point and information provided by the private user it was considered that it would mainly provide regular access to private property for a moderate number of farm vehicles and a small number of pedestrians.
- 2.1.17 C34 Fysons level crossing is approximately 725m southwest of C01 and provides access to farmland on both sides of the railway via private unpaved farm tracks which run across agricultural land and link to Long Drove approximately 500m to the east of the level crossing.
- 2.1.18 The approaches to the level crossing are along dirt tracks made by farm vehicles. These tracks have a moderate gradient and are very uneven. There are also gates on either side of the

crossing. The nature of these routes would restrict access to some pedestrian users, particularly those with mobility impairments.

- 2.1.19 As Fysons is a private user worked crossing, a new census survey was not considered necessary at this location and it was agreed with Network Rail that the Private Users for this level crossing would instead be issued with a questionnaire. This questionnaire sought to capture not only the average use of the level crossing but also whether there were any times of the year when usage peaked, such as during the harvesting season for example. The Private User of Fysons indicated that the crossing was used by an average of the following per day:
- 1 adult pedestrian
 - 1 pedestrians under 18 years old
 - 2 cars
 - 2 single tractors
 - 6 tractors with trailers
 - 1 tracked vehicle with/without trailers or large attachment
- 2.1.20 I have described more detail about the farm that has private rights to use this crossing in paragraph 2.1.1.9 above. It should be noted, however, that accessibility to this crossing is more restricted due to the field on approach being ploughed over and put to crop, and therefore it is likely to have less frequent use.
- 2.1.21 Based on the location of the crossing point and feedback from public consultation it was considered that it would mainly provide regular access to private property for a moderate number of farm vehicles and a small number of pedestrians.
- 2.1.22 The proposed alternative routes can be seen on drawing numbers MMD-367516-C01-GEN-005, MMD-367516-C02-GEN-005, MMD-367516-C33-GEN-005 and MMD-367516-C34-GEN-005 which can be found in Appendix F of core document NR26.
- 2.1.23 Existing public rights of way over the Chittering crossing will be extinguished. Footpath 18 will be diverted onto a new footpath, approximately 250m in length, on the western side of the railway heading north to join footpath 16 and cross the railway at Jack O'Tell level crossing. This will require a newly created 2-metre wide unsurfaced footpath along the field boundary outside of Network Rail land and provision of two new metal footbridges (approximately 9 metres long) to cross drainage ditches. On the eastern side of the railway approximately 300m metres of current footpath 18 which heads north from Chittering level crossing until it meets footpath 16 will be extinguished.
- 2.1.24 The total additional length of the diversion route from C01 to C33 is approximately 410m.
- 2.1.25 Due to current problems with accessibility at C01 (notably the presence of stiles), closure and diversion of users is unlikely to result in a reduction in pedestrian accessibility. Therefore, a DIA is not required.
- 2.1.26 The proposals submitted with the Network Rail (Cambridgeshire Level Crossing Reduction) Order set out that existing private vehicular rights over the Nairns crossing would be extinguished and the diversionary route would use the existing private tracks through the site to Dimmocks Cote road level crossing. They also set out that C33 Jack O'Tell (Adam's Crossing) private vehicle level crossing would be closed and the public footpath crossing for pedestrians will remain open. In order to cross the railway by vehicular means a combination of private farm tracks and adopted highway would be used to divert to Bannolds level crossing to the south, which has automatic half barriers, or the A1123 to the north. At Jack O'Tell (Adam's Crossing) level crossing pedestrian wicket gates would be provided.

- 2.1.27 Having considered the objections of FC Palmer & Sons and their subsidiaries (together with other third party objections), Network Rail has concluded that it should not close both of Nairns and Jack O'Tell crossings, and that one of those crossings should remain open to vehicular traffic relating to FC Palmer & Sons' farming operations.
- 2.1.28 The decision about which of Nairns or Jack O'Tell should remain open depends on the provision of appropriate means of access between the crossing in question and the remainder of the farm holding. In both cases, land which is currently farmed by FC Palmer & Sons/its subsidiaries can be used for such means of access. However, some of that land is farmed under contract or pursuant to a farm business tenancy, and in each instance the freeholder's agreement would be required to create permanent rights of access over the land for the benefit of FC Palmer & Sons. Negotiations are underway with the relevant freeholders, but until those negotiations are concluded, it is not possible to determine which of the crossings should remain open.
- 2.1.29 Because at least one of the crossings is to be closed but it is not yet clear which one will be closed, Network Rail continues to seek the powers in the Order to close both of the crossings. However, it undertakes as follows:
- a. Network Rail will not exercise the powers in the Order to close both of Nairns and Jack O'Tell;
 - b. Network Rail will not exercise the powers in the Order in respect of either Nairns or Jack O'Tell until a permanent means of access from the crossing which is to remain open to the remainder of FC Palmer's landholding has been secured;
 - c. If permanent rights to use the existing means of access between Nairns and the farmed land to the east of the railway can be secured by agreement, the powers in the Order will not be exercised so as to close Nairns to farm traffic and the crossing will be upgraded through the provision of Miniature Stop Lights. The telephone system will be maintained. Network Rail will continue to review level crossing risk and whether further enhancements are required;
 - d. If the rights referred to in (c) above cannot be secured by agreement, but a new means of access from Jack O'Tell northwards along the eastern side of the railway can be, the powers in the Order will not be exercised so as to close Jack O'Tell to farm traffic and the crossing will be upgraded through the provision of Miniature Stop Lights and the installation of a telephone system. Network Rail will continue to review level crossing risk and whether further enhancements are required.
- 2.1.30 Existing private rights over the Fysons level crossing are to be extinguished and there are no existing public rights to use this level crossing. In order to cross the railway a combination of private farm tracks and adopted highway would be used to divert to either Nairns, Jack O'Tell or Bannolds level crossing, which has automatic half barriers.
- 2.1.31 The total additional length of the vehicle diversion route, via Bannolds level crossing, from one side of the level crossing to the other is approximately 3700m, however, the origin and destination points will affect the actual diversion length.
- 2.1.32 Following a scoping study although the diversion route results in significant increases in walking distances, as this is a rurally located private user crossing, it is unlikely to be a route used by people from protected characteristics to access local amenities. A questionnaire response received by the private user indicated that only two pedestrians regularly use the crossing. Therefore, it is felt that no DIA is required.
- 2.1.33 There is no direct connectivity to the wider public rights of way at C01 and C33 to the west although the Ouse Valley Way lies approximately 2500m to the northwest of the level

crossings. The long distance Fen Rivers Way lies approximately 1500m to the east of the level crossings and can be reached via a 300m long section of road walking on Long Drove and public byway. The public rights of way that make use of the level crossing are approximately 2400m long depending on origin and destination and are orientated generally east / west. These public rights of way would provide the means of connectivity between Upware and Chittering (approximately 4500m) with the potential for more westerly links from Chittering to the Ouse Valley way. The proposed diversion maintains the east west connectivity with an additional increase walking length of approximately 410m on the existing 2400m lengths.

- 2.1.34 A variation on the diversion route for C01 was considered for the first round of public consultation is shown red in Document **NR32/2 at Tab 2**. This red route was not supported by CCC and was not taken forward to the next round of consultation.
- 2.1.35 The proposal shown at round 1 consultation for C02 (see Document **NR32/2 at Tab 2**) was subject to a Stage 1 Road Safety Audit. The Audit Team concluded that the A1123 Newmarket Road carriageway was narrow and the available verge was also narrow due to steep embankments which are likely to result in pedestrians walking within the carriageway. High vehicle speeds were observed along this section which may give drivers limited time to react to pedestrians within the carriageway. Alternatively, drivers may swerve to avoid a pedestrian in the carriageway, with a risk of head-on vehicle collisions as a result.
- 2.1.36 It was recommended that a footway is provided for pedestrians. However, the design team considered that this would not be required as C02 Nairns (No. 117) level crossing is a private user worked level crossing which is predominantly used by vehicles.
- 2.1.37 The updated proposal to maintain either Nairns or Jack O'Tell level crossings for private users will remove the potential problem raised as part of the RSA.
- 2.1.38 A Road Safety Audit was also undertaken proposal shown at round 1 consultation for C33 Jack O' Tell (Adam's Crossing) level crossing and C34 Fysons level crossing. The Audit Team did not identify any road safety related issues associated with the schemes.
- 2.1.39 The proposals at the level crossing have been discussed in five workshops with the local highway authority. Officers have objected to the farm vehicle use of public roads and byways at C02, C33 and C34, however, the proposals to maintain either C02 Nairns or C33 Jack O'Tell as a private user crossing would remove their concerns.
- 2.1.40 In response to the TWAO submission different alternative routes or concepts were suggested by Objectors as part of the TWAO process. These has been assessed further and the considerations are presented in Document **NR32/2 at Tab 7, pages 196 and 203**.
- 2.1.41 Following consideration of use of the existing public right of way at C01 Chittering level crossing and the assessment of the proposed alternative in terms of impacts on the environment, users and other impacted parties, I am satisfied that the proposed route is suitable and convenient when considered in the context of the purpose and characteristics of the existing route.
- 2.1.42 I am satisfied that proposals put forward for the private crossings at C02 Nairns, C33 Jack O'Tell and C35 Fysons provide a a reasonable and proportionate response to the objections, which continues to serve the Order's purposes but which reduces the impact on FC Palmer and Sons' farming operations. The undertakings above also address the concerns of other objectors in respect of increased farm traffic on the local highway network.

2.2 C03 West River Bridge

- 2.2.1 Public Footpath 7, promoted as the Ouse Valley Way footpath, runs as an unsurfaced path along the southern side of the river Great Ouse to West River Bridge level crossing. To the east of the crossing the footpath connects to a footbridge which spans the river linking the footpath on the north bank. Fields border the River Great Ouse and there is a large waterbody to the southwest of the level crossing.
- 2.2.2 The approach to the level crossing is via a steep grass path, the immediate approach is extremely overgrown and would be difficult to access for any user. Access to the level crossing also requires use of a stile; it is therefore inaccessible for users with mobility difficulties.
- 2.2.3 Historic census data was available that was collected in June 2013. No users were recorded in the 9 day period of the survey.
- 2.2.4 Of the 2 people that provided feedback during the first round of public consultation, 1 indicated that they rarely use the crossing and 1 used it monthly. Both respondents stated that they used it for leisure purposes.
- 2.2.5 Based on the location of the crossing point and feedback from public consultation it was considered that it would mainly provide infrequent leisure access to the wider public rights of way for a relatively small number of pedestrians.
- 2.2.6 The proposed alternative route can be seen on drawing number MMD-367516-C03-GEN-005, which can be found in Appendix F of core document NR26.
- 2.2.7 Existing public rights of way over the crossing will be extinguished. Footpath 7 will be diverted via a new footpath, approximately 50m in length, to the north, to pass under the existing railway bridge (NR bridge no. 1157) outside of Network Rail land. This will require a newly created 2m wide footpath which will include gravel/stone surfacing beneath the bridge.
- 2.2.8 Following a scoping study due to current problems with accessibility it was considered that a DIA was not required.
- 2.2.9 There is no significant change to the total length route due to the proposed diversion.
- 2.2.10 The level crossing provides direct connectivity to the long distance Ouse Valley Way to the west the long distance Fen Rivers Way to the east of the level crossings. These long distance public rights of way provide walks of over 20km to the west, north and south of the level crossing.
- 2.2.11 East / west connectivity is retained and the diversion distance is not significantly changed.
- 2.2.12 No other alternatives were considered.
- 2.2.13 The proposals at the level crossing have been discussed in five workshops with the local highway authority. Officers had no objections to the proposed route.
- 2.2.14 It was suggested by CCC that further consideration was required for a small retaining structure to be installed beneath the bridge. This structure would protect the footpath and assist in ensuring the path is usable throughout the year. Following investigation, this solution was discounted on the grounds of the potential impact on the conveyance of water through the structure and likely objection from the Environment Agency.
- 2.2.15 The headroom clearance for the footpath was also investigated and it was considered that the headroom would be similar or greater than the headroom clearance available to the north of the River Great Ouse along Footpath No. 6.

- 2.2.16 The surfacing beneath the bridge required further discussion. It was deemed necessary to propose a stone surfacing along the proposed footpath beneath the railway bridge. This would reduce the likelihood of the surface being washed away during a flooding event.
- 2.2.17 Following consideration of use of the existing route across the level crossing and the assessment of the proposed alternative in terms of impacts on the environment, users and other impacted parties, I am satisfied that the proposed route is suitable and convenient when considered in the context of the purpose and characteristics of the existing route.

2.3 C04 No. 20

- 2.3.1 At the level crossing on the west side of the railway, existing footpath 10, runs as an unsurfaced path crossing south east through fields. On the eastern side of the railway the unsurfaced path then heads east towards Melbourn on a field boundary track to join bridleway 12 near St Johns Farm.
- 2.3.2 Access to the level crossing on both sides is through fields. The public footpath extends from Station Road on the east and leads to agricultural land on the western side of the railway line. There are also pedestrian gates on either side of the level crossing. The current route is likely to be unsuitable for users with mobility or visual impairments, and parents with pushchairs or young children.
- 2.3.3 The need for new data was identified at C04 No. 20 and a nine-day census survey in accordance with Network Rail Standard GRD007 was subsequently commissioned to take place between the 18th and 26th of June 2016. During the nine-day survey period, which included two weekends, a total of 53 pedestrians were recorded using the level crossing with the busiest day being Sunday 19th June 2016 when 12 pedestrians were recorded.
- 2.3.4 Of the 13 people that provided feedback during the first round of public consultation, 2 indicated that they used it daily, 5 used it weekly, 2 used it monthly, 3 indicated that they rarely use the crossing and 1 never used it. 9 respondents stated that they used it for leisure purposes, 1 used it to access their own property, 2 used it to access local amenities and 1 gave no response.
- 2.3.5 Based on location of the crossing point and feedback from public consultation and usage data it is considered that the crossing is used by a relatively small number of people to access the wider footpath network and local amenities.
- 2.3.6 The proposed alternative route can be seen on drawing number MMD-367516-C04-GEN-005, which can be found in Appendix F of core document **NR26**.
- 2.3.7 It is proposed that existing public rights of way over the crossing will be extinguished. Footpath 10 will be diverted via a new footpath, approximately 400m in length, on the western side along the field margin outside of Network Rail land heading north to join the footway on Station Road and across the railway. This will require creation of a 2m wide unsurfaced footpath along the field boundary. On the eastern side of the railway current footpath 10 which heads east from No.20 level crossing, will be extinguished. A new section of 2m wide unsurfaced footpath, approximately 100m in length, will be created along the field boundary, outside of Network Rail land, adjacent to Station Road to link to existing bridleway 12. Approximately 380m of the existing footpath will be stopped up.
- 2.3.8 The total length of the diversion route is approximately 290m, however, the origin and destination points will affect the overall diversion length for many users.
- 2.3.9 The level crossing provides some linkage between Chiswick End to the west of the railway and Melbourn to the east of the railway. To access these villages via the public right of way

requires some sections of rural road walking at present. The total length of the public right of way is approximately 1800m which can be extended by using the byway to the south. Footpath 9 can be reached via the level crossing from the west, using Station Road and this is unaffected by the proposals.

- 2.3.10 The proposals maintain the east west connectivity over the railway via the bridge on Station Road, new footpaths and footway walking. The route is approximately 290m longer than the existing route.
- 2.3.11 The proposals create approximately 500m of new field footpaths to replace the approximate length of 380m of footpath which is to be extinguished.
- 2.3.12 The Route Requirement Document (RRD), which is appended to the proof of Andy Kenning **NR30/2 at Tab 1**, solution and that was taken forward to the Round 1 consultation considered an alternative footpath diversion to the west of the railway. It was proposed at that stage to use an existing private hard surfaced agricultural track for the new footpath to link to station road. In addition, users would use the footway on the eastern side of Station, therefore crossing the road twice to link to the wider PROW network. The nature of the route has been subject to revision and refinement as a result of consultation feedback. The consultation route shown at round 1 can be seen in Document **NR32/2 at Tab 2** and the round 2 consultation route can be seen in Document **NR32/2 at Tab 3**.
- 2.3.13 The proposal shown at round 1 consultation (see Document **NR32/2 at Tab 2**) was subject to a Stage 1 Road Safety Audit. The Audit Team identified safety concerns with the proposed diversion route along Station Road in which the existing footways are poor in some locations. The Road Safety Audit Team observed the verge to be undulating and difficult to walk on increasing the risk of trips and falls. It was noted that traffic flow and speeds were relatively high on Station Road. It was recommended that the existing footway on the western side of Station Road is extended for the length of the diversion.
- 2.3.14 The design team response was to consider an alternative off-road route at the end of the existing footway to the west of Station Road along the field boundary behind the hedgerow to the west of Station Road. This was incorporated into the design shown on drawings MMD-367516-C04-GEN-005, which can be found in Appendix F of core document **NR26**. The amended design was subject to a Stage 1 Road Safety Audit in September 2017 (see document **NR32/2 at Tab 11**) and the Audit Team did not identified any safety issues. The RSA considered the junction of Station Road with the access to the light industrial units, but did not raise any concerns.
- 2.3.15 Automatic Traffic Count data (see Document **NR32/2 at Tab 1**) was collected in June 2016 on Station Road, just south of the bridge that showed an average 2 way daily traffic flow of 5327 vehicles and 85th percentile speed of vehicles of 36.4mph where the posted speed limit is 30mph. HGVs accounted for approximately 1.5% of the 2 way daily traffic flow. This was repeated in October 2016 and showed an average 2 way daily traffic flow of 5345 vehicles and 85th percentile speed of vehicles of 34.5mph. HGVs accounted for approximately 1.25% of the 2 way daily traffic flow.
- 2.3.16 A census count of the number of pedestrian users of Station Road from the October survey. During the nine-day survey period, a total of 676 pedestrians and 824 cyclists were recorded using the road bridge on Station Road with the busiest day being Monday 10th October 2016 when 87 pedestrians and 115 cyclists were recorded.
- 2.3.17 Publicly available accident data shows that there were no recorded pedestrian casualties on the Station Road diversion route from 1999-2016. Accident data for the most recent five year

period was also received from CCC. This data confirmed there was one vehicle collision on Station Road during this period along the proposed diversion route.

- 2.3.18 Pedestrian figures suggest that approximately 6 additional pedestrians a day can be anticipated to divert to Station Road to join the average 75 existing pedestrians a day that safely use existing Station Road footway provided by CCC at present.
- 2.3.19 DIA scoping indicates the level crossing is not accessible for wheelchairs and pushchairs, which was confirmed by the census data. It is anticipated that Station Road footway will continue to be used in the same manner as present and not made worse by the level crossing closure. It was considered that due to current constraints on accessibility that a DIA was not required.
- 2.3.20 The proposals were considered acceptable when all factors were assessed on this section of the route, and the introduction of the field edge footpath proposed to avoid a section of verge walking is considered to improve the walking route for users of Station Road footway.
- 2.3.21 The proposals at the level crossing have been discussed in 5 workshops with the local highway authority. Officers have objected to the proposed route.
- 2.3.22 To address concerns about desire lines for walking and to address concerns about the loss of amenity the round 2 consultation proposals (see Document **NR32/2 at Tab 3**) were amended to lie further from the railway and to provide a field route rather than a route along a hard surfaced track. To seek to mitigate the concerns raised by the RSA and consultation feedback the route along Station Road was shown to use both the west and east side footways with a cross over point. This was subsequently rejected in favour of the section of off highway footpath in field margins adjacent to Station Road following assessments of round 2 consultation feedback.
- 2.3.23 In response to the TWAO submission different alternative routes or concepts were suggested by Objectors as part of the TWAO process. These have been assessed further and the considerations are presented in Document NR32/2 **at Tab 7, pages 199 and 206**.
- 2.3.24 Following consideration of use of the existing route across the level crossing and the assessment of the proposed alternative in terms of impacts on the environment, users and other impacted parties, I am satisfied that the proposed route is suitable and convenient when considered in the context of the purpose and characteristics of the existing route.

2.4 C07 No. 37

- 2.4.1 Existing footpath 4 runs as an unsurfaced path crossing south east from the village of Harston through agricultural fields with small areas of woodland and running parallel to a watercourse to No. 37 level crossing. On the southern side of the railway the unsurfaced path then heads south east within fields to join the B1368 (London Road).
- 2.4.2 The level crossing is accessed via field margins, which appear, especially on the eastern side, to be overgrown and unsuitable for people with mobility difficulties. On the western side of the level crossing there is an area of woodland. Gates are also present on either side of the level crossing.
- 2.4.3 The need for new data was identified at No. 37 level crossing and a nine-day census survey to be in accordance with Network Rail Standard GRD007 was subsequently commissioned to take place between the 18th and 26th of June 2016. During the nine-day survey period, which included two weekends, a total of 29 pedestrians were recorded using the level crossing with the busiest day being Sunday 19th June 2016 when 7 pedestrians were recorded.

- 2.4.4 Of the 18 people that provided feedback during the first round of public consultation, 2 indicated that they used it daily, 3 used it weekly, 3 used it fortnightly, 8 used it monthly, 2 indicated that they rarely use the crossing. 16 respondents stated that they used it for leisure purposes, 1 used it to access neighbouring property and 1 used it to access local amenities.
- 2.4.5 Based on location of the crossing point and feedback from public consultation and usage data it is considered that the crossing is used regularly by a relatively small number of people mainly to access the wider footpath network.
- 2.4.6 The proposed alternative route can be seen on drawing number MMD-367516-C07-GEN-005, which can be found in Appendix F of core document **NR26**.
- 2.4.7 It is proposed that existing public rights of way over the level crossing will be extinguished. Footpath 4 will be diverted on the western side of the railway via a new footpath, approximately 460m in length, heading north east to B1368 (London Road). This will require a 3m wide unsurfaced footpath within field margins outside of Network Rail land. The diversion then continues south along a 2m wide unsurfaced footpath in field margins adjacent to the eastern side of London Road, approximately 160m in length, crossing bridleway 3 and continuing as 2m wide unsurfaced footpath, approximately 120m in length, to the existing bridge on London Road to cross the railway. Stepped access will be provided from the new footpath on the north side of the railway to the existing footway on the bridge. Stepped access will also be provided on the south side of the bridge connecting into a new 2m wide unsurfaced footpath heading south, approximately 120m in length, within field margins adjacent to the western side of London Road. A new hoggin path approximately 120m long will be provided in the highway verge between the end of the in field footpath and the existing hoggin path in the western highway verge to the south. Approximately 175m of footpath 4, leading up to No.37 level crossing on the western side of the railway will be extinguished. The ongoing footpath from No.37 level crossing to Station Road, approximately 500m in length will be extinguished.
- 2.4.8 An Equality and Diversity Overview Report was prepared to analyse the accessibility of the existing level crossing and the proposed alternative provision. This more detailed consideration of equalities issues recommended that a full Diversity Impact Assessment was undertaken. The DIA concluded that due to the availability of the alternative route in the local area to cross the railway, closure and redirection along the proposed diversion route is considered an appropriate solution. However, there were further points raised as potential actions for which consideration should be given. These are recorded in the table below:

DIA Action	Project Team Response
Develop a communication strategy to ensure that local residents are kept abreast of developments, including scheduling of works, details of enhancements and improvements, and any other benefits of the scheme, particularly focussing on user safety.	NR to undertake this at detailed design and/or implementation stage.
Explore improvements to diversion routes including: signage to support way finding; and ensuring level surfaces where possible, with the incorporation of dropped kerbs and tactile paving. This will ensure that pedestrian accessibility is maintained along the current route.	NR to undertake this at detailed design and/or implementation stage.
Ensure that measures to improve the permanent diversion route meet guidelines in the Equality Act 2010 where possible in order to ensure that the route is as accessible as can be for all groups.	
Ensure that the new footpaths are created to accessible standards. Where appropriate, the new paths should have an even surface, tactile paving, dropped kerbs and wayfinding signs. The proposal states that the	NR to undertake this at detailed design

DIA Action	Project Team Response
new paths will be 2m to 3m wide. This would help ensure equality of access is maintained for all users.	
<p>If it is not possible to provide a step-free diversion, stepped routes should be designed to ensure they are as accessible as possible.</p> <p>Stepped routes should adhere to the following guidelines²:</p> <p>The use of single steps should be avoided as these can be easily overlooked. Steps should be uniform within a series with consistent risers (maximum 150mm in height) and treads (minimum 280mm in length). To enhance access for people with mobility impairments (including walking frames users), risers and treads should have a height / length of maximum 100mm and minimum 550mm respectively.</p> <p>The maximum total rise per flight of steps without a landing is 1.2m. Resting landings (approximately 1.8m in length) should be provided for every 1.2m flight of steps. Additionally, steps should have a slight cross-fall to shed water.</p>	NR to undertake this at detailed design and/or implementation stage.
<p>Visual markings and tactile paving should be used on the approaches to the top and bottom of the steps and at the edge of each step. These should extend the full width of the step. The use of non-slip and non-reflective surfaces should also be incorporated in the design.</p> <p>Handrailing should be provided on either side of the flight of stairs.</p>	NR to undertake this at detailed design and/or implementation stage.

- 2.4.9 The route is approximately 350m longer than the existing route, however, the origin and destination points will affect the overall diversion length for many users.
- 2.4.10 The level crossing provides some linkage between Harston to the west of the railway and Little Shelford to the east of the railway. To access these villages via the public right of way requires rural road walking at present which is not increased by the proposals. The total length of the public right of way is approximately 1400m. The new PROW route will improve linkages between Harston and Hauxton, located to the north of the LX as a direct link between footpath 4 and byway 3 is created. The link to the scheduled monument off Shelford Road to the south of the railway is maintained.
- 2.4.11 The proposals maintain the east west connectivity over the railway via the bridge on London Road, new footpaths and footway walking. The route is approximately 350m longer than the existing route.
- 2.4.12 The proposals create approximately 870m of new field footpaths to replace the approximate 750m of footpath which is to be extinguished.
- 2.4.13 The only alternative route considered was the diversion to the London Road bridge but the nature of the route has been subject to revision and refinement as a result of consultation feedback. The consultation route shown at round 1 can be seen in Document **NR32/2 at Tab 2** and the round 2 consultation route can be seen in **Document NR32/2 at Tab 3**.
- 2.4.14 Consideration was given as to whether it was feasible to replace the proposed stepped accesses with an alternative ramped access in order to reach the B1368, however, the resulting land take required for construction of ramps could not be justified in this location, based on current usage of the existing crossing.
- 2.4.15 The proposal shown at round 1 consultation (see **Document NR32/2 at Tab 2**) was subject to a Stage 1 Road Safety Audit carried out in line with HD19/15 and by an independent team remote

² Sensory Trust (2013): "Steps". See: http://www.sensorytrust.org.uk/resources/InfoSheet_Steps.pdf

from the option development design team. Audit Team identified safety concerns at the junction of the B1368 London Road and Shelford Road. This is a wide junction mouth where vehicles are turning at speed due to the relaxed radii and this increases the potential for conflict between pedestrians and vehicles. It was therefore recommended that pedestrians are diverted along the western side of the B1368 London Road and cross to the east side of the B1368 London Road to the north of the London Road to Shelford Road junction. The RSA stated that visibility from the railway bridge is good in both directions with a wide hardstanding on either side, which provides a suitable location for pedestrians to cross the B1368 London Road.

- 2.4.16 Automatic Traffic Count data (see **Document NR32/2 at Tab 1**) was collected in October 2016 on London Road, just south of the bridge that showed an average 2 way daily traffic flow of 3215 vehicles and 85th percentile speed of vehicles of 50.2mph (83kph) where the posted speed limit is 60mph. HGVs accounted for approximately 1.0% of the 2 way daily traffic flow.
- 2.4.17 The forward visibility/stopping site distance to the crossing northern most crossing point is approximately 165m from the south and in excess of 400m from the north. Design Manual for Roads and Bridges (DMRB) Volume 6 Section 1 Table 3 indicates that a desirable minimum stopping distance for 85kph is 160m. The crossing point is suitably located for vehicles to observe pedestrian movements with an adequate distance to stop if needed.
- 2.4.18 The forward visibility/stopping site distance from the north to the road bridge is approximately 120-140m depending on the pedestrian chooses to cross and in excess of 250m from the south. Design Manual for Roads and Bridges (DMRB) Volume 6 Section 1 Table 3 indicates that a desirable minimum stopping distance for 85kph is 160m with one step below desirable minimum being 120m. Within the context of the bridge location within the rural road layout (no road junctions, easily understood road layout, no frontage, uphill braking for instance) it is considered that a relaxation of the stopping sight distance would still be suitable. Warning signs with respect to the crossing point would be installed to assist drivers.
- 2.4.19 The proposals at the level crossing have been discussed in five workshops with the local highway authority. Officers have objected to the proposed route.
- 2.4.20 The results of the public consultation events were discussed with CCC and the meeting minutes are Document **NR32/2 at Tab 5**. The results of these discussions lead to the evolution of the design proposals to mitigate CCC concerns about the extinguishment of part of the existing public rights of way. Off road walking was provided alongside London Road and steps were provided to gain access to the highway bridge on the B1368 London Road to minimise walking along the relatively narrow verge on the B1368 London Road. The proposed field boundary footpath which connects to BOAT 3 to the north of the railway is redirected behind the hedge in field margins adjacent to the B1368 London Road.
- 2.4.21 It was noted that the existing Byway 3 made use of London Road for ongoing travel by equestrians and it is assumed that this is considered fit for purpose by CCC. The proposed footpaths alongside London Road were therefore deemed to suitable set at 2m widths for footpath use as the loss of private land for bridleway use could not be justified in direct relation to the closure of the level crossing as there are limitations to what can be delivered through the TWAO process
- 2.4.22 However, CCC stated that they had ambitions to improve the bridleway network in this area and saw the provision of a bridleway links to be suitable mitigation for closure of the level crossing route and increased road walking. Therefore a 3m wide PROW will be provided from the remaining part of footpath 4 to the B1368 London Road, but with footpath status. The footpath runs along a field edge track and CCC would have the opportunity to upgrade the route to

bridleway in the future, separately from the works associated with the TWAO level crossing closure, should they wish to do so.

- 2.4.23 The provision of stepped access and details for the proposed steps and footpaths were discussed and agreed in principle with CCC.
- 2.4.24 In response to the TWAO submission a different alternative route or concept was suggested by an Objector as part of the TWAO process. This has been assessed further and the considerations are presented in Document **NR32/2 at Tab 7, page 204**.
- 2.4.25 Following consideration of use of the existing route across C10 level crossing and the assessment of the proposed alternative in terms of impacts on the environment, users and other impacted parties, I am satisfied that the proposed route is suitable and convenient when considered in the context of the purpose and characteristics of the existing route.

2.5 C08 Ely North Junction

- 2.5.1 Existing footpath 11 runs as an unsurfaced path crossing north east through agricultural fields with scattered trees and a pond approximately 100m north of the existing footpath, to Ely North level crossing. On the eastern side of the railway line the unsurfaced footpath then heads east before heading north along a parallel railway line to join Ely Road.
- 2.5.2 The crossing is not inclusive to those with limited mobility or who use a wheelchair as there are stiles either side of the line with uneven and narrow pathways that are largely overgrown, which would pose a significant challenge to a wheelchair user.
- 2.5.3 The need for new data was identified at Ely North Junction and a nine-day census survey to be in accordance with Network Rail Standard GRD007 was subsequently commissioned to take place between the 18th and 26th of June 2016. During the nine-day survey period, which included two weekends, a total of 11 pedestrians were recorded using the level crossing with the busiest day being Sunday 19th June 2016 when 8 pedestrians were recorded.
- 2.5.4 Of the 5 people that provided feedback during the first round of public consultation, 2 indicated that they used it fortnightly, and 1 rarely used it. All 5 respondents stated that they used it for leisure purposes.
- 2.5.5 Based on location of the crossing point and feedback from public consultation and usage data it is considered that the crossing is used infrequently by a small number of people to access the wider footpath network.
- 2.5.6 The proposed alternative route can be seen on drawing number MMD-367516-C08-GEN-005, which can be found in Appendix F of core document NR26.
- 2.5.7 Existing public rights over the level crossing are to be extinguished. Footpath 11 will be diverted on the west side of the railway via a new 2m wide unsurfaced footpath, approximately 150m in length, heading north within field margins, outside of Network Rail land. The footpath will then move into Network Rail land past the residential dwellings to the west and narrow to a minimum of 1.5m wide gravel/stone surfaced footpath, leading to Queen Adelaide (Peterborough) crossing to the north. This is where users can cross the railway. Users continue east along Ely Road using the existing southern footway. Approximately 60m of existing footpath immediately east of Ely North level crossing will be extinguished.
- 2.5.8 The proposed footpath diversion within Network Rail land must be offset from the nearest running rail by 3m to achieve the safety clearances required on the rail network. This has resulted in a pinch point close to the junction of the footpath with Ely Rod, where the footpath is

anticipated to be between 1.5-2m wide over a length of approximately 10m. This reduction in the standard width is necessary to avoid affecting the adjacent private property, including mature vegetation and outbuildings. The footpath dimensions (based on OS data) can be seen on Drawing no 367516-MMD-00-XX-DR-C08-0001 which can be found in **NR32/2 at Tab 10**. It is considered that the pinch point over a nominal distance is manageable and will not affect use of the footpath based on the existing level of usage

- 2.5.9 Following a scoping study due to current problems with accessibility it was considered that a DIA was not required.
- 2.5.10 The total additional length of the diversion route is approximately 10m.
- 2.5.11 The public rights of way using the level crossing can be seen to provide linkage (via a short section of footway walking on the B1382) to the Fen Rivers Way, a long distance walk offering walks of over 23km (14 miles) to Cambridge south of Ely. The public rights of way using the level crossing can be seen to provide linkage (via a short section of footway walking Prickwillow Road) to the Ouse Valley Rivers Way, a long distance route offering walks of over 40km (24 miles) north to Kings Lynn.
- 2.5.12 The Route Requirement Document (RRD), which is appended to the proof of Andy Kenning **NR30/2 at Tab 1**, solution considered an alternative footpath diversion to the west of the railway. This route was the line of the submitted TWAO route but this early stage of consideration it was not progressed to mitigate concerns about loss of private land which were unknown at the time of the feasibility works carried out to inform the design progression.
- 2.5.13 Different options were considered at an early stage in the design refinement and these were shown as blue and red routes at round 1 consultation. The consultation routes shown at round 1 can be seen in Document **NR32/2 at Tab 2**.
- 2.5.14 The red route was taken forward and the round 2 consultation route can be seen in Document **NR32/2 at Tab 3**. This option was eventually discounted due to the issues raised in the road safety audit and the issues faced with trying to segregate pedestrians from HGV movements along the private access road into the adjacent private factory unit.
- 2.5.15 The proposal shown at round 1 consultation (see Document **NR32/2 at Tab 2**) was subject to a Stage 1 Road Safety Audit. The Audit Team identified safety concerns with both the Red and Blue Routes. This was due to pedestrians being directed along an industrial site access road where Heavy Goods Vehicles (HGV) movements are taking place. HGV drivers may not be aware of pedestrians walking within the site which could result in conflict between vehicles and pedestrians. This may be particularly apparent when crossing the access to the warehousing units where large vehicles carry out reversing manoeuvres. It was recommended that a footpath is provided for pedestrians on the eastern side of the access road so that they are segregated from the industrial site traffic. This issue was removed by the final design decision to utilise a different diversionary proposal.
- 2.5.16 The RSA did not identify any issues with the use of Ely Road on the alternative diversion route where existing footways are available.
- 2.5.17 Automatic Traffic Count data (see Document **NR32/2 at Tab 1**) was collected in October 2016 on Ely Road west of the railway line that showed an average 2 way daily traffic flow of 4523 vehicles and 85th percentile speed of vehicles of 39mph where the posted speed limit is 30mph.
- 2.5.18 The proposals at the level crossing have been discussed in 5 workshops with the local highway authority. Officers have objected to the proposed route due to a length of the diversion which is anticipated to be between 1.5-2m wide over a length of approximately 10m.

- 2.5.19 As the final route was considered to be significantly different from that shown a round 2, a further information update was issued to parties including the public and statutory consultees and this is shown in **NR32/2 at Tab 4**. No changes were made following this exercise.
- 2.5.20 Following consideration of use of the existing route across C08 level crossing and the assessment of the proposed alternative in terms of impacts on the environment, users and other impacted parties, I am satisfied that the proposed route is suitable and convenient when considered in the context of the purpose and characteristics of the existing route.

2.6 C09 Second Drove and C24 Cross Keys

- 2.6.1 These level crossings have been considered together as they share a single solution for the closure proposal. At the first stage of the project C23 Adelaide level crossing was also proposed for closure and shared a solution with these crossings, however, the final design solution called for the C23 Adelaide level crossing to remain open.
- 2.6.2 At C09 Second Drove bridleway 25 runs north east through fields along Clayway Drove, an existing track, towards Clayway level crossing and connects into footpath 49 leading to Second Drove level crossing. There is a watercourse running parallel to Bridleway 25 and a small area of wooded trees. Footpath 49 continues north east from Second Drove crossing along Second Drove, an existing track through fields.
- 2.6.3 The accessibility of C09 is poor with the use of stiles to access the crossing excluding wheelchair users and those with pushchairs. This would also cause difficulty for users with limited mobility, as would the unpaved, overgrown and grassy pathways and inclines along the route to the crossing.
- 2.6.4 The need for new data was identified at Second Drove and a nine-day census survey to be in accordance with Network Rail Standard GRD007 was subsequently commissioned to take place between the 18th and 26th of June 2016. During the nine-day survey period, which included two weekends, a total of 13 pedestrians were recorded using the level crossing with the busiest day being Sunday 19th June 2016 when 7 pedestrians were recorded. Following the completion of data analysis from this level crossing it was noted that footage had been lost due to equipment failure on Sunday 26th June 2016 between 11:30 and 00:00 and that no transcription of data was possible during this time.
- 2.6.5 On completion of the consultation exercises for C09 involving both the public and Cambridgeshire County Council, it was identified that additional data would be beneficial to the study and a second census survey was commissioned at this level crossing. A nine-day census survey to be in accordance with Network Rail Standard GRD007 was subsequently commissioned to take place between the 7th and 15th January 2017. Following the completion of data analysis from this level crossing it was noted that camera equipment was stolen from this location which prevented the analysis of usage on Sunday 15th January 2017. During the eight-day survey period, which included one full weekend and one Saturday, a total of 18 pedestrians were recorded using the level crossing with the busiest days being Tuesday 10th and Saturday 14th January 2017 when 4 pedestrians were recorded each day.
- 2.6.6 Of the 8 people that provided feedback during the first round of public consultation, 1 indicated that they used it fortnightly, 3 used it weekly, 3 used it monthly and 1 gave no response. 7 respondents stated that they used it for leisure purposes and 1 cited other reasons.
- 2.6.7 Based on location of the crossing point, feedback from public consultation and usage data it is considered that the crossing is used regularly by a small number of people to access the wider footpath network.

- 2.6.8 The C24 Cross Keys level crossing is located at the end of public footpath 50, which runs in a north easterly direction connecting with footpath 15 immediately east of the crossing and joining bridleway 25, approximately 250m to the south west. Footpath 15 runs in a north south direction along the west bank of the River Great Ouse. The river is approximately 50m east of the crossing.
- 2.6.9 The C24 level crossing itself is a pedestrian only crossing that is accessible only on foot from the pathways it connects. These pathways are unpaved and contain overgrown plant life that reduces the ability of those with limited mobility to access the crossing. There are also stiles on each side of the crossing that prevents use of the crossing by wheelchair users or those with pushchairs.
- 2.6.10 The need for new data was identified at Cross Keys and a nine-day census survey to be in accordance with Network Rail Standard GRD007 was subsequently commissioned to take place between the 18th and 26th of June 2016. During the nine-day survey period, which included two weekends, a total of 32 pedestrians were recorded using the level crossing with the busiest day being Sunday 26th June 2016 when 8 pedestrians were recorded.
- 2.6.11 Of the 8 people that provided feedback for C24 during the first round of public consultation, 4 used it weekly, 2 used it fortnightly and 2 used it monthly. All 8 respondents stated that they used it for leisure purposes.
- 2.6.12 Based on location of the C24 crossing point and feedback from public consultation and usage data it is considered that the crossing is used regularly by a relatively small number of people to access the wider footpath network.
- 2.6.13 The proposed alternative route can be seen on drawing number MMD-367516-C09-GEN-005 and MMD-367516-C24-GEN-005, which can be found in Appendix F of core document **NR26**.
- 2.6.14 Existing public rights over C09 will be extinguished. Footpath 49 on the western side of the railway will be extinguished, approximately 175m in length, and users will instead make use of existing bridleway 25 heading north east to Clayway level crossing. This is where users will cross the railway. New Bridleway gates will be installed at Clayway level crossing in addition to the existing gates. Users will then be diverted onto a new 2m wide unsurfaced footpath approximately 175m in length, running south along a field margin outside of Network Rail land, to connect into existing footpath 49 on the eastern side of the railway.
- 2.6.15 Existing public rights over C24 will be extinguished. Users would make use of an existing underbridge to the north of the crossing. Users would be diverted along a new 2m wide unsurfaced footpath to the west of the railway and on existing footpath 15 to the east to access the underbridge or south to cross at C23 Adelaide crossing. Two steel footbridges each approximately 10m long, with concrete bollards at each end to prevent misuse, are proposed to cross a drainage ditch along the route of the new footpath heading north from Cross Keys level crossing. In addition, one composite (steel and concrete) footbridge approximately 8m in length will be provided along the new footpath to the south of Cross Keys level crossing.
- 2.6.16 At C09, although accessibility of the proposed diversion route may restrict access for some users in terms of uneven grass tracks on the approach to Clayway level crossing, the existing accessibility problems (notably the presence of stiles) associated with Second Drove level crossing mean that no negative impacts are likely to be incurred by people from protected characteristic groups. It is also noted that there will be relatively minor changes to pedestrian accessibility, in terms of walking distances and a positive impact on gradient, associated with the diversion route.

- 2.6.17 Following a scoping study although the proposed diversion route significantly increases walking distance and may require use of infrastructure that is not fully accessible, problems with accessibility (stiles and overgrown vegetation) at the current crossing means that closure and permanent diversion is unlikely to reduce pedestrian accessibility and so no DIA is required.
- 2.6.18 The total additional length of the diversion route for C09 is approximately 160m via Clayway level crossing, however, the origin and destination points will affect the overall diversion length for many users. There is no significant additional diversion lengths as a result of the closure of C24 level crossing.
- 2.6.19 The public rights of way using the level crossing can be seen to provide linkage to the Fen Rivers Way, a long distance walk offering walks of over 25km (15 miles) to Cambridge south of Ely. The public rights of way using the level crossing can be seen to provide linkage to the Ouse Valley Rivers Way, a long distance route offering walks of over 38km (23 miles) north to Kings Lynn. There is also a route utilising C09 which takes users along Clayway Drove and Kettlesworth Drove, generally north / south and approximately 3000m in length, which provides links to the north eastern part of Ely. The diversion maintains the connectivity via a short length additional length of new public right of way.
- 2.6.20 The initial design proposals considered that all three (C09, C23 and C24) of the level crossing in close proximity would be closed. The options brought forward from the initial feasibility stage was to close C09 level crossing to all users. Users would be able to cross the railway (Ely March and Peterborough line) at the adjacent Clayway level crossing using Clayway Drove (bridleway). If they wish to continue north and cross the railway (Bethnal Green and King's Lynn line) a new footpath will be provided linking to an existing railway underpass allowing access to the River Great Ouse waterfront. C23 and C24 were also proposed to be closed to all users who would be diverted to a railway underbridge to the northeast, via existing and new public footpaths.
- 2.6.21 The consultation routes shown at round 1 can be seen in Document **NR32/2 at Tab 2**
- 2.6.22 The proposals at the level crossing have been discussed in five workshops with the local highway authority. Officers have not objected to the proposed route.
- 2.6.23 Following the round 1 consultations the proposals were discussed with the local authority who expressed the view that one of the level crossings (C23) should remain open due to reduce the impact on access to the river. This was considered further and subsequently incorporated into the round 2 consultation proposals (see Document **NR32/2 at Tab 3**).
- 2.6.24 Following further discussions with the local authority following round 2 consultation it was decided to incorporate an additional link between C23 and C24 level crossing on the east side of the railway to create a circular walk which would remove an objection from the local authority.
- 2.6.25 As the final route was considered to be significantly different from that shown at round 2, with the retention of C23, a further information update was issued to parties including the public and statutory consultees and this is shown in **NR32/2 at Tab 4**. No changes were made following this exercise.
- 2.6.26 Following deposition CCC has objected to the route due to the requirement for a third footbridge and asks that Network Rail amend the route to use an existing private culvert located to west of the proposed bridge location. The private culvert was shown as part of the diversion route in the Round 2 public consultation, however subsequent investigation has cast doubt on the form of this feature and its appropriateness for a public right of way. The route is not used by vehicles and it is unclear whether there is a formal culvert structure, or a localised narrowing of the ditch.

The LIDAR assessment shows a drop of 1m to 1.4m at this location which would still require a bridge. The decision was therefore taken to locate the new bridge on the pedestrian desire line.

- 2.6.27 Following consideration of use of the existing routes across C09 and C24 level crossings and the assessment of the proposed alternative in terms of impacts on the environment, users and other impacted parties, I am satisfied that the proposed diversion is suitable and convenient when considered in the context of the purpose and characteristics of the existing route.

2.7 C10 Coffue Drove

- 2.7.1 Byway 44 runs in a north south direction over the railway at Coffue Drove level crossing, making use of a track, Coffue Drove, through agricultural fields. Byway 44 links to Byway 41 to the North and to Byway 48 to the south. There is an existing underpass immediately adjacent to the west of Coffue Drove level crossing. There are fields with drainage ditches, scattered trees, and hedgerow on both sides of the railway adjacent to Byway Open to All Traffic (BOAT) 44.
- 2.7.2 This crossing and the access to it is uneven with grass verges and loose surfaces, so is likely to pose a challenge to wheelchair users or those with limited mobility. There are also gates on both sides of the crossing.
- 2.7.3 Through discussions with Network Rail it was decided that as there was an underpass available for use by pedestrians directly adjacent to the Coffue Drove level crossing, that a full census survey would not be of benefit to the study.
- 2.7.4 Of the 9 people that provided feedback during the first round of public consultation, 3 indicated that they used it weekly, 1 used it fortnightly, 3 used it monthly and 2 indicated that they rarely use the crossing. 7 respondents stated that they used it for leisure purposes, 1 used it to access their own property and 1 used it to for commuting.
- 2.7.5 Based on location of the crossing point and feedback from public consultation and usage data it is considered that the crossing is used infrequently by a small number of people mainly to access the wider footpath network.
- 2.7.6 The proposed alternative route can be seen on drawing number MMD-367516-C10-GEN-005, which can be found in Appendix F of core document **NR26**.
- 2.7.7 Existing public rights over the railway will be extinguished. Byway 44 will be diverted on to a route parallel to and west of the railway for a distance of approximately 120m making use of the adjacent underpass immediately west of Coffue Drove level crossing to cross the railway. The byway will have a width and height limitation through the underpass. The underpass is currently used by small vehicles and has a headroom of approximately 2.1m. Signing will be provided to indicate the limited width and headroom. This new byway will connect into the existing byway 44 on the south and north side of the railway. Mounting blocks will be provided on both sides of the railway to allow horse riders to dismount safely before using the underpass. Large vehicles which are unable to use the underpass will use Beald Drove level crossing to cross the railway via byway 43.
- 2.7.8 Following a scoping study as both the current crossing and proposed diversion have similar accessibility problems and the diversion route results in very minor changes to pedestrian accessibility, it is felt that access for all users groups will be retained at the current level. Therefore, a DIA is not required.
- 2.7.9 There is no significant change in length of the diversion route for users able to use the underpass. The additional diversion route to Beald Drove level crossing for larger vehicles is

approximately 850m, however, the origin and destination points will affect the overall diversion length for many users.

- 2.7.10 There is general north / south connectivity on public rights of way which provide a link between Ely to the south and Littleport to the north. This route is approximately 6.5km. There is also some wider connectivity towards the west (Little Downham) on routes approximately 4.0km in length.
- 2.7.11 No other routes were considered to enable the level crossing to be closed. However, initial consideration prior to the first round of consultations was that the use of the underpass adjacent to the level crossing would be restricted to bridleway use only and that all motorised users would divert to Beald Drove level crossing. This can be seen in round 1 summary sheets shown in Document **NR32/2 at Tab 2**.
- 2.7.12 The proposals at the level crossing have been discussed in five workshops with the local highway authority. Officers have not objected to the proposed route.
- 2.7.13 Following round 1 consultation it was noted that motorbike riders (Trail Riders) had objected to the proposal to downgrade the use of the adjacent underpass to bridleway use which would reduce the number of available byway routes in the area. Consequently, it was decided to amend the proposal to retain the byway, for those users able to negotiate the width and height restrictions. This can be seen in round 2 summary sheets shown in Document **NR32/2 at Tab 3**.
- 2.7.14 From an assessment of the consultation feedback, council comments and associated additional information, it was considered that the level crossing could be closed to all users. Lidar information was obtained to assess the concerns raised regarding drainage within the underpass. It was noted that a new surface layer was provided within the existing underpass and localised re-profiling of the existing ground required on approach to and departure from the underpass. The re-profiling would improve the likelihood of the underpass being usable throughout the year. The drainage run off would outfall into existing drainage ditch which is maintained by the Internal Drainage Board.
- 2.7.15 Consultation with the British Horse Society noted that the resurfacing should be non slip (ie with a brushed finish) and that mounting blocks should be clear of obstructions. It was also suggested that warning signals were provided to warn users when trains were arriving to reduce the likelihood of a horse being spooked within the underpass. This was investigated and discounted on the grounds of cost and difficulty in implementing a feasible solution due to changes in train timetables.
- 2.7.16 Following consideration of use of the existing route across C10 level crossing and the assessment of the proposed alternative in terms of impacts on the environment, users and other impacted parties, I am satisfied that the proposed route is suitable and convenient when considered in the context of the purpose and characteristics of the existing route.

2.8 C11 Furlong Drove

- 2.8.1 Byway 33 heads north from O Furlong Drove towards Furlong Drove level crossing where it then continues north past Ash Tree Farm. Footpath 8 intersects byway 33 and connects to Main Drove to the east through fields and across drainage ditches. Byway 34 runs parallel and to the west of Furlong Drove and heads north to Straight Furlong underbridge and south to O Furlong Drove where the railway can be crossed at Third Drove level crossing. Main Drove runs parallel and to the east of Furlong Drove and heads north to Short Drove and south to Third Drove level crossing.

- 2.8.2 The level crossing, while designated as a Byway Open to All Traffic (BOAT), is not currently accessible by any vehicles wider than a trail bike due to narrow approaches and gates. It is noted that both equestrians and trail riders would be expected to dismount prior to using the current level crossing'
- 2.8.3 The crossing has some accessibility problems. It does have gates wide enough to accommodate most wheelchair users; however, the crossing boards are elevated, restricting access for some users. The approach to the crossing on either side of the track is also likely to exclude those with limited mobility as the steep and uneven grass inclines would not reasonably accommodate wheelchairs or provide the stability required by users with limited mobility.
- 2.8.4 The need for new data was identified at Furlong Drove and a nine-day census survey to be in accordance with Network Rail Standard GRD007 was subsequently commissioned to take place between the 18th and 26th of June 2016. During the nine-day survey period, which included two weekends, a total of six pedestrian users were recorded of which two were identified as being railway personnel. Usage of the level crossing by two pedestrians was recorded on three separate days during the survey period on Saturday 18th, Tuesday 21st and Wednesday 22nd of June. No vehicles were observed using the level crossing during the nine-day census survey.
- 2.8.5 Of the 14 people that provided feedback during the first round of public consultation, 2 indicated that they used it daily, 4 used it weekly, 1 used it fortnightly, 3 used it monthly and 4 indicated that they rarely use the crossing. 12 respondents stated that they used it for leisure purposes, 1 used it for commuting, 2 used it to access neighbouring properties.
- 2.8.6 Based on location of the crossing point and feedback from public consultation and usage data it is considered that the crossing is used intermittently by a small number of people to access the wider footpath network.
- 2.8.7 The proposed alternative route can be seen on drawing number MMD-367516-C11-GEN-005, which can be found in Appendix F of core document **NR26**.
- 2.8.8 Existing public rights over the level crossing will be extinguished. A new 3m wide unsurfaced bridleway approximately 660m in length, will be created outside of Network Rail land to connect byway 34 and O Furlong Drove. Footpath 8 will be upgraded to a bridleway, approximately 390m in length between BOAT 33 and Main Drove. Users can then head north west and cross the railway via Straight Furlong underbridge or head south and cross the railway at Third Drove level crossing.
- 2.8.9 Following a scoping study although the diversion route poses problems that may restrict some people from groups with protected characteristics from using the route, the current crossing is not accessible due to uneven grass inclines. Furthermore, the limited usage and rural location of the crossing means that the impact of its closure and redirection is likely to be minimal. Therefore, it is felt that a DIA is not required.
- 2.8.10 The public right of way that uses the level crossing forms part of the long distance Hereward Way which is a 177km path from Oakham to Knettleshill Heath. This section of the Hereward Way takes users between Ely south of the level crossing to Peterborough northwest of the level crossing. Locally the level crossing would provide means to access Little Downham south of the level crossing, Dunkirk and Pymoor both west of the level crossing and Littleport east of the level crossing.
- 2.8.11 On considering the desire lines for public movements it is considered that from Pymoor and Dunkirk the closure of the would not adversely affect users who wished to travel north and that O Furlong Drove would be used. There would be no change in length.

- 2.8.12 Users of footpath Downham 22 wishing to reach the northern end of footpath Downham 2, east of the railway, would have an additional length of approximately 750m if diverting to the west and 1120m if diverting to the east.
- 2.8.13 Users of footpath Downham 22 wishing to reach the western end of BOAT 33 would have an additional length of approximately 710m. This would extend by 135m from BOAT 36.
- 2.8.14 The alternative diversion maintains connectivity for the long distance routes in the area with an increased diversion length which depends on user origin and destination.
- 2.8.15 The existing route along BOAT 33 provides the opportunity for two separate gallops for equestrians due to the need to dismount at the railway, rather than one continuous gallop, one 1250m in length and one 875m in length. It is possible to undertake an uninterrupted gallop of 1635m in length on the western diversion route on Byway 34 and the 875m gallop is still available via the use of Main Drove. The provision of the new bridleway west of the railway connects byway 34 and O Furlong Drove and removes road walking/riding at the southern end of the western route.
- 2.8.16 There have been several options which have been considered during the development of the alternative route submitted with the TWAO application.
- 2.8.17 The initial pre-feasibility options submitted with the Route Requirement Document (RRD), which is appended to the proof of Andy Kenning **NR30/2 at Tab 1**, considered prior to public consultations, noted that the level crossing could be downgraded to a footpath level crossing. Any bridleway users would be diverted either north west to cross the railway at Straight Furlong underbridge or head south and cross the railway at Third Drove level crossing. This was discounted on the grounds that the approach to the level crossing is a byway and a footpath downgrade would not provide a beneficial solution to remove users from the level crossing.
- 2.8.18 The initial proposal shown at round 1 consultation (see **Document NR32/2 at Tab 2**) was that the level crossing will be extinguished to all users who would be diverted either north west to cross the railway at Straight Furlong underbridge or head south and cross the railway at Third Drove level crossing.
- 2.8.19 The proposal shown at round 2 consultation (see **Document NR32/2 at Tab 3**) was that the level crossing will be extinguished. Any users would be diverted either north west to cross the railway at Straight Furlong underbridge or head south and cross the railway at Third Drove level crossing. A new footpath would be provided to the south of the level crossing, footpath 8 would be upgraded to a bridleway and BOAT 33 downgraded to a bridleway.
- 2.8.20 It was considered that these options did not provide a suitable solution for all of the existing potential users of the level crossing. The census survey did not pick up any usage by equestrians or trail bike riders, but it was recognised that these categories of users were likely to use the crossing on an intermittent basis and therefore should be catered for.
- 2.8.21 The proposal shown at round 1 consultation (see **Document NR32/2 at Tab 2**) was subject to a Stage 1 Road Safety Audit carried out in line with HD19/15 and by an independent team remote from the option development design team. The Audit Team did not identify any road safety related issues associated with the scheme.
- 2.8.22 CCC's Accident Investigation team considered the proposals and raised some initial comments indicating that they thought that the alternative on-road route is unsuitable for equestrians due to the road being so narrow, with unsuitable verges and used by heavy agricultural haulage. This was discussed with the independent Road Safety Audit team who had carried out the original RSA and the confirmed that they considered that the verges were adequately wide and

suitable for equestrians to use along much of the route. They also confirmed that the audit took into consideration the fact that large agricultural vehicles were likely to use this section of highway, but considered that equestrians using the route were likely to be familiar with the area, use other roads on approach to this route and were likely to use the carriageway and move into the verge to allow vehicles to pass. The audit team considered that there was good visibility along the majority of the route, and that at the southern end of Main Drove where there are bends on approach to the road level crossing, drivers would be slowing down on approach to the level crossing. The audit concluded that there were no road safety issues with the proposed route.

- 2.8.23 Automatic Traffic Count data shown in **Document NR32/2 at Tab 1**, located on Main Drove east of the level crossing, showed an average 2 way daily traffic flow of 238 vehicles and 85th percentile speed of vehicles of 38.3mph where the posted is 60mph.
- 2.8.24 Automatic Traffic Count data shown in Document **NR32/2 at Tab 1**, located on O Furlong Drove south of the level crossing, showed an average 2 way daily traffic flow of 308 vehicles and 85th percentile speed of vehicles of 36.2mph where the posted is 60mph.
- 2.8.25 Traffic numbers are low and no changes were considered necessary following review of the ATC data against the proposals.
- 2.8.26 The proposals for closure of C11 Level Crossing have been discussed in five workshops with the local highway authority. Officers have objected to the proposed route due to their safety concerns and also due to the loss of the 2km long gallop that the byway 33 provides. It should be noted, however, that any riders would be required to dismount at the level crossing as set out in paragraph 2.8.15. It should also be noted that neither the Trail Riders Fellowship nor the British Horse Society has submitted an objection to the Order proposals.
- 2.8.27 Following consultation rounds 1 and 2, discussions were held with the local authority and the proposals went through a series of amendments to provide a new bridleway to the south of the level crossing with footpath 8 upgraded to a bridleway as mitigation for closure of the level crossing route. Consideration was given to downgrading Byway 33 to a bridleway however it was concluded that it was not possible to downgrade the byway through the order.
- 2.8.28 In response to the TWAO submission a different alternative route or concept was suggested by Objectors as part of the TWAO process. These have been assessed further and the considerations are presented in **Document NR32/2 at Tab 7, pages 193, 200 and 205**
- 2.8.29 Both CCC and the Ramblers have raised the issue that the existing route forms part of the Hereward Way, and I discuss this in paragraphs 2.8.10 to 2.8.14 above. It is recognised that the long distance route will need to be amended on relevant mapping as new editions are published. It is considered that the western diversion route, utilising byway 34 and the new section of bridleway to the west of the railway connecting byway 34 and O Furlong Drove, would be the most appropriate route. This route fits within the context of the Hereward Way in the local area, which utilises byways, rural roads, bridleways and footpaths.
- 2.8.30 Following consideration of use of the existing route across Furlong Drove level crossing and the assessment of the proposed alternative in terms of impacts on the environment, users and other impacted parties, I am satisfied that the proposed route is suitable and convenient when considered in the context of the purpose and characteristics of the existing route.

2.9 C12 Silt Drove

- 2.9.1 Silt Road is a public road running north from Upwell Road to Silt Drove level crossing, before continuing north east to Badgeney Road. Silt Road has arable fields adjacent on both sides and there is a dense area of residential properties approximately 175m west. There are several properties adjacent to Silt Road including Rose Cottage and Meadow Croft to the south of the railway.
- 2.9.2 Access to the crossing on both sides is via a steep gravelled, uneven single lane road. Due to the steep gradient of this road it is likely that any users with mobility difficulties or wheelchairs would have significant difficulty using this crossing. Vehicle users must open a gate to access the crossing, while pedestrians have to use a stile. This is again likely to present difficulties to those with mobility issues.
- 2.9.3 The need for new data was identified at Silt Drove and a nine-day census survey to be in accordance with Network Rail Standard GRD007 was subsequently commissioned to take place between the 18th and 26th of June 2016. During the nine-day survey period, which included two weekends, a total of 334 pedestrians and 62 cyclists were recorded using the Level Crossing with the busiest day being Sunday 16th June when 46 pedestrians and 16 cyclists were recorded. A total of 15 vehicles were also recorded during the nine-day survey period with the busiest day being Thursday 23rd June when 4 vehicles were observed of which 2 were Heavy Goods Vehicles (HGV) and 2 were Tractors with trailers.
- 2.9.4 Of the 23 people that provided feedback during the first round of public consultation, 2 indicated that they used it daily, 10 used it weekly, 3 used it fortnightly, 1 used it monthly, 5 indicated that they rarely use the crossing and 1 never used it. 16 respondents stated that they used it for leisure purposes, 2 used it to access neighbouring property, 1 used it to access school and 4 gave no stated reason.
- 2.9.5 It is considered that the crossing is used on a regular basis by a relatively large number of people, mainly for leisure access to the wider area but also to access the properties around the level crossing. It was considered that there was low, infrequent vehicle use of the level crossing.
- 2.9.6 The proposed alternative route can be seen on drawing number MMD-367516-C12-GEN-005, which can be found in Appendix F of core document NR26.
- 2.9.7 Existing public rights over the level crossing will be downgraded to bridleway status. Silt Drove level crossing will remain a user worked crossing for registered users. Bridleway gates, mounting blocks and vehicular turning heads will be provided on both sides of the railway. Motorised users will be diverted from the south of Silt Drove crossing via Upwell Road and Badgeney Road to Badgeney Road level crossing.
- 2.9.8 The diversion route for motorised users requires an additional length of approximately 1000m, however, the origin and destination points will affect the overall diversion length for many users. There would be no change for bridleway users and those who become private registered users of the level crossing.
- 2.9.9 Following a scoping study, although public vehicular users of the crossing will be required to travel considerably further, this impact is unlikely to be felt disproportionately by particular sections of the population protected by equality legislation. A DIA is not required as no alterations to pedestrian access is anticipated for any protected characteristic group.
- 2.9.10 An alternative option was shown at round 1 public consultation which can be seen in Document **NR32/2 at Tab 2**. The alternative option closed the crossing to all users (red option). This option

was discounted as the proposed diversion route was considered inconvenient for the high numbers of pedestrian users of the crossing and the nature of the journeys.

- 2.9.11 The proposals shown at round 1 consultation (see **Document NR32/2 at Tab 2**) was subject to a Stage 1 Road Safety Audit carried out in line with HD19/15 and by an independent team remote from the option development design team. The Audit Team did not identify any road safety related issues associated with the scheme.
- 2.9.12 The proposals for closure of Silt Drove Level Crossing have been discussed in 5 workshops with the local highway authority. Officers had no objections to the proposed route.
- 2.9.13 Turnings heads have been added following round 2 consultation to assist turning manoeuvres for traffic accessing the road up to the level crossing location.
- 2.9.14 Following consideration of use of the existing route across Silt Drove level crossing and the assessment of the proposed alternative in terms of impacts on the environment, users and other impacted parties, I am satisfied that the proposed route is suitable and convenient when considered in the context of the purpose and characteristics of the existing route

2.10 C13 Middle Drove

- 2.10.1 The level crossing is currently a public road. Pedestrians can walk on a circular route west of March along the verge of the adopted, surfaced highways Middle Road, Moule Road and Whitemoor Road. The route leads through agricultural fields. Footpath 27 runs along Plantwater Drove and connects to the circular route on Whitemoor Road.
- 2.10.2 The accessibility is good as it is a largely paved crossing that connects two paved roads with a relatively level surface, enabling wheelchair users and those with pushchairs as well as users with limited mobility to access the crossing. The pedestrian gate is wide enough to accommodate most wheelchairs and mobility scooters.
- 2.10.3 The need for new data was identified at Middle Drove and a nine-day census survey to be in accordance with Network Rail Standard GRD007 was subsequently commissioned to take place between the 18th and 26th of June 2016. During the nine-day survey period, which included two weekends, a total of 43 pedestrians and 27 cyclists and equestrians were recorded using the level crossing with the busiest day being Tuesday 21st June 2016 when 11 pedestrians, 1 cyclist and 1 equestrian were recorded. A total of 7 vehicles were recorded using the crossing during the survey period, of which 4 were cars, 2 were Light Goods Vehicles (LGV) and 1 was a Heavy Goods Vehicle (HGV). A maximum of 2 vehicles used the crossing during the survey period which was recorded occurring on both Tuesday 21st and Wednesday 22nd June 2016.
- 2.10.4 Following the completion of data analysis from this level crossing it was noted that footage had been lost due to equipment failure on Sunday 19th June 2016 between 07:25 and 11:30 and that no transcription of data was possible during this time.
- 2.10.5 Of the 9 people that provided feedback during the first round of public consultation, 4 indicated that they used it weekly, 1 used it fortnightly, 1 used it monthly, 2 indicated that they rarely use the crossing and 1 never used it. 4 respondents stated that they used it for leisure purposes, 2 used it to access their own property, 1 used it to access neighbouring properties and 2 gave no reasons.
- 2.10.6 Based on location of the crossing point and feedback from public consultation and usage data it is considered that the crossing is used regular by a relatively small number of people including cyclists and equestrians for a variety of reasons. It was considered that there was low, infrequent vehicle use of the level crossing.

- 2.10.7 The proposed alternative route can be seen on drawing number MMD-367516-C13-GEN-005 in Appendix F of core document reference **NR26**.
- 2.10.8 Existing public rights over the level crossing will be downgraded to bridleway status with private rights retained as a user worked crossing for registered users. New bridleway gates and mounting blocks will be provided on both sides of the railway. Motorised users will be diverted along the Whittlesey Road to cross the railway at the automatic half barrier level crossing at Whitemoor Drove. Users will continue on Whitemoor Road to connect back up with Middle Drove. The existing telephone and miniature stop lights will be retained on site at Middle Drove.
- 2.10.9 Following a scoping study, although public vehicular users of the crossing will be required to travel considerably further, this impact is unlikely to be felt disproportionately by particular sections of the population protected by equality legislation. A DIA is not required as no alterations to pedestrian access is anticipated for any protected characteristic group.
- 2.10.10 Public motorised users would be diverted up to an additional 1.4km. This will depend on user origin and destination. There would be no change for bridleway users and those who become private registered users.
- 2.10.11 The initial option under consideration was to downgrade the existing public highway level crossing to a private user worked level crossing and a footpath level crossing. Equestrians, cyclists and public motorised users would be diverted to Whitemoor Road level crossing to the east. This was shown at round 1 public consultation which can be seen in **Document NR32/2 at Tab 2**. This option was discounted as it was considered that it did not provide a suitable solution for equestrian users.
- 2.10.12 The proposals shown at round 1 consultation (see **Document NR32/2 at Tab 2**) were subject to a Stage 1 Road Safety Audit carried out in line with HD19/15 and by an independent team remote from the option development design team. The Audit Team did not identify any road safety related issues associated with the scheme.
- 2.10.13 On completion of the consultation exercises involving both the public and Cambridgeshire County Council, it was identified that additional traffic data would be beneficial to the study and an Automatic Traffic Count (ATC) was commissioned on Whitemoor Road to the north east of Middle Drove level crossing. The ATC took place for a period of nine days between Saturday 7th and Sunday 15th January 2017.
- 2.10.14 Automatic Traffic Count data, shown in **NR32/2 at Tab 1** showed an average 2 way daily traffic flow of 150 vehicles and 85th percentile speed of vehicles of 29.5mph where the posted is 60mph.
- 2.10.15 The proposals at C13 have been discussed in five workshops with the local highway authority who objected to the proposals on the grounds that the local authority may not be granted private rights to use the crossing.
- 2.10.16 The proposals were amended following round 1 consultations at which the local authority noted that they considered that there was likely to be use of the level crossing by cyclists and equestrians. This was borne out by the census counts and the proposals were amended to downgrade the level crossing to bridleway status (with private vehicle rights). Turning heads have been added following round 2 consultation to assist turning manoeuvres for traffic accessing the road up to the level crossing location. Mounting blocks were also noted as a requirement. Passing bays were considered on Middle Drove, however, they were discounted on the grounds that turning heads were provided at the level crossings which were suitable for

refuse vehicles. Requirements for bridleway gates was considered and included within the proposal.

- 2.10.17 The local Internal Drainage Board (March West and White Fen IDB) have objected to the proposals as the proposed turning heads are located over culverted water courses under their control. Existing culverted field access points will be utilised on both sides of the level crossing for the turning heads. These turning heads will have to meet adoptable highway standards and therefore may result in an increase in size of the culverted area and also the construction of a highway pavement with the associated construction depth. The works required to undertake this level of construction will be determined at the detailed design stage in consultation with the IDB and the Highway Authority. Approvals will be required from both parties at each stage, both in terms of design, but also construction methodologies and any temporary works. Visual, and potentially intrusive surveys, will be required to ascertain the depth of the culvert, current loading limits and works required to construct an adopted highway over the top.
- 2.10.18 Following consideration of use of the existing route across the level crossing and the assessment of the proposed alternative in terms of impacts on the environment, users and other impacted parties, I am satisfied that the proposed route is suitable and convenient when considered in the context of the purpose and characteristics of the existing route

2.11 C14 Eastrea Cross Drove

- 2.11.1 Footpath 50 is located south of Eastrea and links Wype road to footpath 52, which then links to byway 51. Wype Road links to byway 49 and bridleway 60. The existing footpath crosses the railway at Eastrea Cross Drove level crossing and users of the local footpath network can cross the railway at Eastrea level crossing on Wype Road and at Baileys level crossing on footpath 52.
- 2.11.2 In terms of accessibility this crossing is restrictive to users with limited mobility or who use wheelchairs as the narrow gates and verges and the overgrown and often muddy pathways limit access by those with impaired mobility. In addition, the presence of stiles severely restricts access to the crossing itself. The approaches either side of the crossing are both grassed pathways that may cause further, undue challenges to those with limited mobility.
- 2.11.3 The need for new data was identified at Eastrea Cross Drove and a nine-day census survey to be in accordance with Network Rail Standard GRD007 was subsequently commissioned to take place between the 18th and 26th of June 2016. During the nine-day survey period, which included two weekends, a total of 2 pedestrians were recorded using the level crossing with the busiest day being Sunday 19th June when 2 pedestrians were recorded.
- 2.11.4 Of the 3 people that provided feedback during the first round of public consultation 1 person rarely used it and 2 people never used it. Feedback indicates that the crossing provides leisure access to the local footpath network for 1 respondent and 2 gave no response.
- 2.11.5 Based on location of the crossing point and feedback from public consultation and usage data it is considered that the crossing is used very infrequently by a small number of people to access the wider footpath network.
- 2.11.6 The proposed alternative route can be seen on drawing number MMD-367516-C14-GEN-005 in Appendix F of core document reference **NR26**.
- 2.11.7 Existing public rights of way over the level crossing will be extinguished. Footpath 50 would be diverted on the north of the railway via a new 2m wide unsurfaced footpath in field margin, outside of Network Rail land, heading west to connect to byway 49 Lake Drove. This new

footpath will be approximately 700m in length. A steel footbridge (>8m in length) will be required to cross a drainage ditch along the new footpath route, providing a “pop out” onto Wype Road close to Eastrea level crossing. Users will then head south east on Wype Road using existing verges to cross the railway at Eastrea road level crossing. Approximately 350m of footpath 50 to the south of the railway will be extinguished.

- 2.11.8 Following a scoping study although the increased walking distances of the proposed diversion route may pose some problems for users, the current accessibility problems at Eastrea Cross Drove level crossing mean that it is unlikely that accessibility for people from protected characteristic groups will be reduced. Therefore, no DIA is required.
- 2.11.9 The additional diversion route is approximately 660m in length but this depends on the users origin and destination. It is considered that the new PROW to connect to byway 49 provides improved links to the PROW network that runs east/west to the north of the railway. The “pop out” link to Wype Road will allow users to link into the proposed new footpath on the south west side of Eastrea level crossing to be provided as part of the alternative route for crossing C15 Brickyard Drove described in 2.12 below. The diversion route retains the east west connectivity via the use of Eastrea road level crossing.
- 2.11.10 Public rights of way in the area generally run southwest to north east. It is difficult to discern a wider link of the public right of way over the level crossing as road walking would be required to reach ongoing public rights of way. The village of Kingsland can be reached at the end of BOAT Whittlesey 51.
- 2.11.11 No other options were proposed, however, the position of the footpath along the field edge to the north of the railway has been considered in some detail. The availability of an area of land between 2 drains that run parallel to and on the north side of the railway was initially considered as a route for the proposed footpath diversion. However, following inspection as part of a site visit to the crossing location, there was less certainty about the viability of this strip of land due to the presence of some infrastructure within it and also the available width and topography of the land here. In addition, one of the drains in this location is under the management of the Internal Drainage Board (IDB) and therefore a decision was taken to reduce the impact on the maintenance activities of this statutory body and place the footpath within the field edge to the north of both drains.
- 2.11.12 The proposals were subject to a Stage 1 Road Safety Audit. The Audit Team did not identify any road safety related issues associated with the scheme.
- 2.11.13 The proposals at C14 have been discussed in 5 workshops with the local highway authority who have not objected to the diversion.
- 2.11.14 In response to the TWAO submission different alternative routes or concepts were suggested by Objectors as part of the TWAO process. These have been assessed further and the considerations are presented in Document **NR32/2 at Tab 7 on pages 197, 198 and 201.**
- 2.11.15 Following consideration of use of the existing route across the level crossing and the assessment of the proposed alternative in terms of impacts on the environment, users and other impacted parties, I am satisfied that the proposed route is suitable and convenient when considered in the context of the purpose and characteristics of the existing route

2.12 C15 Brickyard Drove

- 2.12.1 Footpath 48 is located south of Eastrea and links Benwick road to bridleway 60, which then links to byway 49 at the junction with Wype Road. The existing footpath crosses the railway at

Brickyard Drove level crossing. Footpath 41 runs along the north of the railway between Fen Lots Drove and Brickyard Drove level crossing.

- 2.12.2 The Brickyard Drove level crossing consists of two stiles either side of a railway line with several planks positioned on the track so that people can cross. There is very little crossing infrastructure, with only one side of the track having a solid road surface. This impacts upon the equality value of this crossing are likely to be minimal, due to the current lack of accessibility for people with limited mobility.
- 2.12.3 The need for new data was identified at Brickyard Drove and a nine-day census survey to be in accordance with Network Rail Standard GRD007 was subsequently commissioned to take place between the 18th and 26th of June 2016. During the nine-day survey period, which included two weekends, a total of 22 pedestrians were recorded using the level crossing with the busiest days being Sunday 19th and Saturday 25th June when 6 pedestrians were recorded each day.
- 2.12.4 Of the 4 people that provided feedback during the first round of public consultation, 1 indicated that they used the crossing daily, 1 used it monthly and that 2 people never used it. Feedback indicates that the crossing provides leisure access to the local footpath network for 2 users and 2 gave no specified reason.
- 2.12.5 Based on location of the crossing point and feedback from public consultation and usage data it is considered that the crossing is used regularly by a relatively small number of people to access the wider footpath network.
- 2.12.6 The proposed alternative route can be seen on drawing number MMD-367516-C15-GEN-005 in Appendix F of core document reference **NR26**.
- 2.12.7 Existing public rights of way over the level crossing will be extinguished. Footpath 48, on the south of the railway, heading north east along an existing track towards the level crossing will be diverted via a new 2m wide unsurfaced footpath cross field around Jamwell Farm. This new footpath is approximately 460m in length heading east and then north east to Wype Road and a new footbridge (approximately 5m in length) will be required to cross a small water feature. Users can then cross the railway via Eastrea level crossing using existing verges. Approximately 164m of footpath 48 to the south of the railway will be extinguished.
- 2.12.8 Following a scoping study it was noted that increased walking distances resulting from the proposed diversion route may cause some problems, especially for people with limited mobility. However, due to the current accessibility problems with Brickyard Drove (notably the presence of stiles), closure and redirection is unlikely to reduce pedestrian accessibility. Therefore, no DIA is required.
- 2.12.9 The additional length of the alternative diversion is approximately 680m.
- 2.12.10 The wider public rights of way that use the level crossing can be seen to provide a link between Whittlesey west of the level crossing and Coates (and Kingsland) to the east. This link is approximately 4km in length.
- 2.12.11 The diversion route retains the east west connectivity via the use of Eastrea road level crossing.
- 2.12.12 There have been other options which have been considered during the development of the alternative route submitted with the TWAO application.
- 2.12.13 The initial option was to close the level crossing and divert users west on existing public rights and way and roads to use Fen Lots Drove level crossing. This proposal was shown at round 1

consultation (see **Document NR32/2 at Tab 2**). The route to the east was included further to discussions with CCC as mitigation to the loss of the route over the railway.

- 2.12.14 At round 2 an additional footpath route in new easterly direction to Eastrea road level crossing on Wype Road was considered beneficial to reduce the diversion lengths in that direction. This proposal was added to the plan shown at round 2 consultation (see **Document NR32/2 at Tab 3**). This route was amended following round 2 after further environmental inspections showed that there was the potential for badger activity on the northern leg of the diversion route towards Brickyard Drove. This was subsequently amended to the route can be seen on drawing number MMD-367516-C15-GEN-005 in Appendix F of core document reference **NR26**.
- 2.12.15 The proposal was subject to a Stage 1 Road Safety Audit and the Audit Team did not identify any road safety related issues associated with the scheme.
- 2.12.16 The proposals at C15 have been discussed in 5 workshops with the local highway authority who have not objected to the diversion.
- 2.12.17 The round 1 proposal was considered to a straight extinguishment by the local authority who noted that an additional footpath would assist in removing their objections as described in 2.12.13 above. Due to the suitability of the proposed diversion from footpath 48 to Eastrea road level crossing it was not considered necessary to show a route to Fen Lots Drove level crossing as part of the TWAO submission but this route is still available should users choose to do so.
- 2.12.18 In response to the TWAO submission a different alternative route or concept was suggested by an Objector as part of the TWAO process. This has been assessed further and the considerations are presented in **Document NR32/2 at Tab 7, page 191**.
- 2.12.19 Following consideration of use of the existing route across the level crossing and the assessment of the proposed alternative in terms of impacts on the environment, users and other impacted parties, I am satisfied that the proposed route is suitable and convenient when considered in the context of the purpose and characteristics of the existing route.

2.13 C16 Prickwillow 1

- 2.13.1 The crossing is located approximately 370 m north of the Main Street, Prickwillow. Footpath 57 runs along Branch Bank, east of the River Lark and the crossing lies on Footpath 17 which is located on top a flood bund which runs alongside the west bank (Padnal Bank). C17 lies on the adjacent east bank.
- 2.13.2 The level crossing has already been blocked off and is therefore inaccessible to all users. There is no formal path to the level crossing on either side of the railway; therefore, all users must walk along Branch Bank which leads to a grassy sloped embankment up to the tracks. This is likely to cause accessibility problems for certain user groups, including people with mobility issues, and those with a physical and sensory disability, as well as pushchair users.
- 2.13.3 The need for new data was identified at Prickwillow and a nine-day census survey to be in accordance with Network Rail Standard GRD007 was subsequently commissioned to take place between the 18th and 26th of June 2016. Due to a loss of data as a result of equipment failure on Monday 20th June, the survey was extended by an extra day to include Monday 27th June 2016. At the time of the surveys the level crossing was temporarily closed and as a result the usage data sought to capture instances of pedestrians approaching the level crossing with the intention to cross the railway line but were prevented from doing so. No users were recorded intending to use the crossing during the survey period. It is acknowledged that this data is not representative of 'normal' crossing usage at this location.

- 2.13.4 Of the 3 people that provided feedback during the first round of public consultation, 2 indicated that they rarely use the crossing and 1 used it monthly. All respondents stated that they used it for leisure purposes.
- 2.13.5 Based on location of the crossing point and feedback from public consultation and usage data it is considered that the crossing would be used infrequently by a small number of people to access the wider footpath network when open.
- 2.13.6 The proposed alternative route can be seen on drawing number MMD-367516-C16-GEN-005 in Appendix F of core document reference **NR26**.
- 2.13.7 Existing public rights of way over the level crossing to be extinguished. Footpath 17 to the south of the railway, heading north along Padnal Bank will be diverted via an existing underbridge adjacent to the west of the level crossing. Users can then continue along footpath 17 to the north of the railway. Steps will be provided on both sides of the railway to provide access down the embankment from footpath 17 to make use of the existing underbridge.
- 2.13.8 Following a scoping study as the crossing is currently closed and requires users to negotiate grassy, sloped embankments, the implementation of alternative provision has the potential to improve accessibility (especially if in the form of ramps). It is also noted that no significant change in walking distance or gradient will be seen. Therefore, it was concluded that a DIA was not required. It is noted that ramps were not taken forward as noted in section 2.13.14.
- 2.13.9 There is no significant increase in length to use the diversion to the underpass via the proposed steps.
- 2.13.10 The level crossing lies on a long distance footpath over 3400m long which provides a link between the long distance Hereward Way, a long distance footpath to Mildenhall in the southeast and the Ouse Valley Way in the north.
- 2.13.11 The proposal to use the Padnal Bank was subject to a Stage 1 Road Safety Audit carried out in line with HD19/15 and by an independent team remote from the option development design team. No issues were identified following the Audit.
- 2.13.12 Automatic Traffic Count data shown in **NR32/2 at Tab 1** located on Padnal Bank south of the level crossing, showed an average 2 way daily traffic flow of 50 vehicles and 85th percentile speed of vehicles of 18.6mph where the posted is 60mph.
- 2.13.13 The proposals at C16 have been discussed in 5 workshops with the local highway authority who have not objected to the diversion itself but have objected to the increase in maintenance liability. However, the crossing is currently a footpath and the Council does not have any rights to take maintenance vehicles across the two level crossings. Therefore it is considered that closure of these crossings will not affect the Council's maintenance activities on the embankment.
- 2.13.14 Further consideration on whether ramps could be provided to replace the steps was undertaken and ramps were discounted on the grounds that the existing river embankment is fairly steep and there is limited space to provide a 2m footpath without encroaching onto the carriageway. It was noted that providing a ramp may also affect the stability of the bund.
- 2.13.15 In response to the TWAO submission a different alternative route or concept was suggested by an Objector as part of the TWAO process. This has been assessed further and the considerations are presented in Document **NR32/2 at Tab 7, page 194**.

- 2.13.16 Following consideration of use of the existing route across the level crossing and the assessment of the proposed alternative in terms of impacts on the environment, users and other impacted parties, I am satisfied that the proposed route is suitable and convenient when considered in the context of the purpose and characteristics of the existing route.

2.14 C17 Prickwillow 2

- 2.14.1 The crossing is located approximately 370 m north of the Main Street, Prickwillow. The crossing lies on Footpath 57 which runs on the top of a flood bund alongside along Branch Bank, east of the River.
- 2.14.2 The approach to the level crossing is via a steep grass embankment on either side. Users with mobility and visual impairments, along with parents with pushchairs or small children, would not be able to access the level crossing gates. There is no visible path up to the crossing, and the gates have been blocked by a chain link fence on either side with the crossing temporarily closed on safety grounds. The railway track is raised above and over the intersecting country road, so the level crossing is only accessible via this embankment on either side.
- 2.14.3 The need for new data was identified at Prickwillow 2 and a nine-day census survey to be in accordance with Network Rail Standard GRD007 was subsequently commissioned to take place between the 18th and 26th of June 2016. Due to a loss of data as a result of equipment failure on Monday 20th June, the survey was extended by an extra day to include Monday 27th June 2016. At the time of the surveys the level crossing was temporarily closed and as a result the usage data sought to capture instances of pedestrians approaching the level crossing with the intention to cross the railway line but were prevented from doing so. No users were recorded intending to use the crossing during the survey period. It is acknowledged that this data is not representative of 'normal' crossing usage at this location.
- 2.14.4 Of the 3 people that provided feedback during the first round of public consultation, 2 indicated that they rarely use the crossing and 1 used it monthly. All respondents stated that they used it for leisure purposes.
- 2.14.5 Based on location of the crossing point and feedback from public consultation and usage data it is considered that the crossing would be used infrequently by a small number of people to access the wider footpath network when open.
- 2.14.6 The proposed alternative route can be seen on drawing number MMD-367516-C17-GEN-005 in Appendix F of core document reference **NR26**.
- 2.14.7 Existing public rights of way over the level crossing to be extinguished. Footpath 57 to the south of the railway, heading north along Branch Bank will be diverted via an existing underbridge adjacent to the east of the level crossing. Users can then continue along footpath 57 to the north of the railway. Steps will be provided on both sides of the railway to provide access down the embankment from footpath 57 to make use of the existing underbridge.
- 2.14.8 There is no significant increase in length to use the diversion to the underpass via the proposed steps.
- 2.14.9 Following a scoping study, a DIA was not considered necessary at this crossing as the crossing is currently closed and requires users to negotiate grassy, sloped embankments, the implementation of alternative provision has the potential to improve accessibility (especially if in the form of ramps). It is also noted that no significant change in walking distance or gradient will be seen. The crossing is also in a remote location with minimal pedestrian usage. It is noted that ramps were not taken forward as noted in section 2.14.13.

- 2.14.10 The level crossing lies on a long distance footpath over 3400m long which provides a link between the long distance Hereward Way, a long distance footpath to Mildenhall in the southeast and the Ouse Valley Way in the north.
- 2.14.11 The proposal to use the Branch Bank was subject to a Stage 1 Road Safety Audit carried out in line with HD19/15 and by an independent team remote from the option development design team. No issues were identified following the Audit.
- 2.14.12 The proposals at C17 have been discussed in 5 workshops with the local highway authority who have not objected to the diversion itself but have objected to the increase in maintenance liability. However, the crossing is currently a footpath and the Council does not have any rights to take maintenance vehicles across the two level crossings. Therefore it is considered that closure of these crossings will not affect the Council's maintenance activities on the embankment.
- 2.14.13 Further consideration on whether ramps could be provide to replace the steps was undertaken and ramps were discounted on the grounds that the existing river embankment is fairly steep and there is limited space to provide a 2m footpath without encroaching onto the carriageway. It was noted that providing a ramp may also affect the stability of the bund.
- 2.14.14 In response to the TWAO submission a different alternative route or concept was suggested by an Objector as part of the TWAO process. This has been assessed further and the considerations are presented in **Document NR32/2 at Tab 7, page 194.**
- 2.14.15 Following consideration of use of the existing route across the level crossing and the assessment of the proposed alternative in terms of impacts on the environment, users and other impacted parties, I am satisfied that the proposed route is suitable and convenient when considered in the context of the purpose and characteristics of the existing route.

2.15 C20 Leonards

- 2.15.1 Public footpath 101 is an unsurfaced path that runs in a north easterly direction through agricultural fields from Mill Drove, a public road, approximately 90m west of the crossing, to a sluice where it joins footpath 100, approximately 170m to the north east of the crossing. The immediately surrounding area is predominantly agricultural with Mill Drove Farm and some residential properties along Mill Drove, the nearest. Footpath 114 and byway 113 provide the links to the west of Mill Drove
- 2.15.2 The approach to the level crossing is via a cross field paths through farmland. The path to the east is narrow and uneven due to overgrown vegetation and has a moderate gradient. Each side has a wooden gate which must be shut after use. The route would be difficult to use for people with mobility or visual impairments, along with parents with pushchairs and small children.
- 2.15.3 The need for new data was identified at Leonards and a nine-day census survey in accordance with Network Rail Standard GRD007 was subsequently commissioned to take place between the 18th and 26th of June 2016. During the nine-day survey period, which included two weekends, a total of 181 pedestrians were recorded using the level crossing with the busiest day being Thursday 23rd June 2016 when 36 pedestrians were recorded.
- 2.15.4 Of the 6 people that provided feedback during the first round of public consultation, 1 indicated that they used the crossing daily, 1 used in weekly and 4 used it monthly. 5 respondents stated that they used it for leisure purposes and 1 for Other purposes.

- 2.15.5 Based on location of the crossing point and feedback from public consultation and usage data it is considered that the crossing is used regular by a relatively high number of people to access the wider footpath network.
- 2.15.6 It is noted that while footpath 114 to the west of Mill Drove, is shown on the definitive PROW map, there is no actual physical route on the ground. The path is not signed, the field is ploughed and the definitive route would take the path through an existing wall and building. It would appear that the only route option is via byway 113 to the south.
- 2.15.7 The proposed alternative route can be seen on drawing number MMD-367516-C20-GEN-005, which can be found in Appendix F of core document **NR26**.
- 2.15.8 It is proposed that existing public rights of way over the level crossing will be extinguished. A 190m length of footpath 101 will be extinguished between Mill Drove and a point 90m to the east of Leonards level crossing. A section of footpath 114, approximately 110m long, to the west of Mill Drove will also be extinguished. Leonards level crossing users will be diverted north to Mill Drove level crossing. Footpath 114 will be reinstated on the ground (for a distance of approximately 350m) as an unsurfaced path from the point where it meets byway 113 in the south to the field boundary to the north east. From this point a new 2m wide unsurfaced footpath will be created the field margin around Mill Drove Farm (approximately 230m in length) and users will then make use of the existing verge and carriageway on Mill Drove, crossing the railway at Mill Drove level crossing. A new 2m wide unsurfaced footpath will be provided on the east side of the railway connecting Mill Drove to footpath 101, approximately 260m in length. A composite steel and timber footbridge (6m in length) will be required to cross a drainage ditch adjacent to Mill Drove along the new footpath route.
- 2.15.9 The total additional length of the diversion route over the 2500m long existing rights of way is approximately 255m, however, the origin and destination points will affect the overall diversion length for many users.
- 2.15.10 Following a scoping study, as accessibility at the current crossing is likely to restrict access for some people (due to overgrown vegetation and the route through farmland to access the crossing), especially for those in wheelchairs or with pushchairs, the new route may improve accessibility through diversion to a flat and tarmacked crossing. Therefore, it was considered that a DIA is not required.
- 2.15.11 The public rights of way associated with the level crossing provide a link to Soham to the north east of the level crossing towards Wicken in the south west via rural track walking in the area of Wicken. The public rights of way that can make use of the level crossing are over 2500m in length and would use Mill Drove as footpath 114 is currently not available on site.
- 2.15.12 The new diversion route of the railway maintains links between the public rights of way on both sides of the railway. The route is longer than existing, however, as it provides leisure walking it is considered acceptable.
- 2.15.13 At present due to the current unavailability of footpath 114 the walk from Wicken to Soham involves the use of road walking on Mill Drove over approximately 215m with the associated reduction in amenity value for footpath users. With the reinstatement of footpath 114, on the line of the current definitive map, through the diversion proposals, the length of road walking would reduce to approximately 150m. The nature of all the field routes on the definitive map is assumed to be deemed appropriate for use by CCC who have the authority to ensure that the routes are maintained to a usable standard.

- 2.15.14 Approximately 200m of field walking footpaths are extinguished as part of the proposals and in mitigation approximately 855m of field footpaths are reinstated or newly provided.
- 2.15.15 No other alternatives were considered for the diversion to the Mill Drove road level crossing but the nature of the route has been subject to revision and refinement as a result of consultation feedback. The consultation route shown at round 1 can be seen in **Document NR32/2 at Tab 2** and the round 2 consultation route can be seen in **Document NR32/2 at Tab 3**.
- 2.15.16 The proposal to use Mill Drove road level crossing was subject to a Stage 1 Road Safety Audit carried out in line with HD19/15 and by an independent team remote from the option development design team. No issues were identified following the Audit.
- 2.15.17 Nine day Automatic Traffic Count data (see **Document NR32/2 at Tab 1**) was collected in January 2017 on Mill Drove, just east of Great Drove south of the Mill Drove road level crossing that showed an average 2 way daily traffic flow of 99 vehicles and 85th percentile speed of vehicles of 26.4mph where the posted speed limit is 30mph. Based on the traffic data and RSA outcome the continued use of Mill Drove is considered safe and suitable.
- 2.15.18 The proposals at C20 have been discussed in 5 workshops with the local highway authority who have objected to the proposals on the basis of the additional length of the route.
- 2.15.19 Following round 1 consultation it was concluded that further considered was required to provide an alternative footpath route to meet the desire lines of potential users of the diversion route, particularly pupils of the local schools and Sports Centre.
- 2.15.20 Following round 2 it was noted that the option to re-join Mill Drove just north of the level crossing had not been correctly incorporated to align with CCC requirement and would need to be included in the proposal. It was also acknowledged that subject to traffic data on Mill Drove, the in-field margin footpath heading north from Mill Drove level crossing could be negated. It was also agreed that footpath 114 would be reinstated to provide a continued route to BOAT 113 and reduce verge or carriageway walking on Mill Drove. These considerations were included into the final alternative diversion proposal.
- 2.15.21 Following consideration of use of the existing route across the Level Crossing and the assessment of the proposed alternative in terms of impacts on the environment, users and other impacted parties, I am satisfied that the proposed route is suitable and convenient when considered in the context of the purpose and characteristics of the existing route.

2.16 C21 Newmarket Bridge

- 2.16.1 Public footpath 24 runs as an unsurfaced path crossing in a north south direction, along the east bank of the River Great Ouse and west of agricultural fields. To the north and south of the railway, the footpath follows the course of the river. The River is approximately 40m west of the Newmarket Bridge crossing. Public footpath 23 runs parallel to footpath 24 on the west bank of the river.
- 2.16.2 The accessibility of this site is limited as the uneven ground would make using the crossing difficult for those with limited mobility or wheelchair users. The raised section of track where the crossing is located requires users to scale the embankment using steps which would exclude wheelchair users, those with pushchairs and many users with limited mobility.
- 2.16.3 The need for new data was identified at Newmarket Bridge and a nine-day census survey to be in accordance with Network Rail Standard GRD007 was subsequently commissioned to take place between the 18th and 26th of June 2016. During the nine-day survey period, which

included two weekends, a total of 152 pedestrians were recorded using the level crossing with the busiest day being Friday 24th June 2016 when 28 adult pedestrians were recorded.

- 2.16.4 Of the 5 people that provided feedback during the first round of public consultation, 1 indicated that they used it daily, 1 used it weekly, 1 used it monthly, 1 indicated that they rarely use the crossing and 1 never used it. 2 respondents stated that they used it for leisure purposes, 1 used it to access local amenities and 2 gave no response.
- 2.16.5 Based on location of the crossing point and feedback from public consultation and usage data it is considered that the crossing is used regularly by a moderate number of people to access the wider footpath network and other amenities.
- 2.16.6 The proposed alternative route can be seen on drawing number MMD-367516-C21-GEN-005, which can be found in Appendix F of core document **NR26**.
- 2.16.7 This crossing will be closed to public users with private user rights to be retained. Public users would make use of the existing hardstanding footpath via the underbridge to the west of the crossing.
- 2.16.8 The new diversion route to the west of the railway maintains links between the public rights of way on both sides of the railway. The additional total length of the diversion route is approximately 50m.
- 2.16.9 Following a scoping study, a Diversity Impact assessment was not considered necessary at this crossing due to the current restricted accessibility of the existing crossing route.
- 2.16.10 The level crossing lies on a long distance footpath, the Fen Rivers Way, which provides a link between Ely and Cambridge over 20km in length. There are ongoing long distance routes to the north via the Hereward Way.
- 2.16.11 The proposals at C21 have been discussed in 5 workshops with the local highway authority who have not objected to the proposals.
- 2.16.12 During the design development following round 1 consultation CCC sought clarification on potential flooding for the proposed footpath. CCC suggested that support could be obtained if evidence was provided that the diversion route would be usable the majority of the time and only closed during exceptional events. The Environment Agency confirmed via email that their historic flood maps outlining flood events between 1946-2007 do not shown flood events that affect the proposals at this crossing.
- 2.16.13 Following the meeting on 2nd August 2016, CCC provided details about the Ely Southern Bypass project, which is a separate scheme promoted by CCC, and is located north of C21 Newmarket Bridge level crossing. The information shared was assessed to determine whether a diversion route could be incorporated into the proposed scheme. However, no viable option was determined and CCC agreed that as the design stood it would not be possible to achieve an alternative.
- 2.16.14 Following consideration of use of the existing route across the Level Crossing and the assessment of the proposed alternative in terms of impacts on the environment, users and other impacted parties, I am satisfied that the proposed route is suitable and convenient when considered in the context of the purpose and characteristics of the existing route.

2.17 C22 Wells Engine

- 2.17.1 Public footpath 23 runs as an unsurfaced path crossing in a north south direction, along the west bank of the River Great Ouse and east of agricultural fields. To the north and south of the

railway, the footpath follows the course of the river. The River is approximately 90m east of the Wells Engine crossing. Public footpath 24 runs parallel to footpath 23 on the east bank of the river.

- 2.17.2 The approach to the level crossing is a degrading tarmac path from the north, and a heavily overgrown grass path to the south. Once at the level crossing, there are both a large metal fence and a smaller wooden fence. Both gates must be locked after use. This route would be difficult to navigate for users with mobility or visual impairments, as well as parents with pushchairs and small children.
- 2.17.3 The need for new data was identified at Wells Engine and a nine-day census survey to be in accordance with Network Rail Standard GRD007 was subsequently commissioned to take place between the 18th and 26th of June 2016. During the nine-day survey period, which included two weekends, a total of 69 pedestrians were recorded using the level crossing with the busiest day being Saturday 25th and Sunday 26th June 2016 when 12 adult pedestrians were recorded on both days.
- 2.17.4 Of the 6 people that provided feedback during the first round of public consultation, 4 used it monthly and 2 used it weekly. Feedback indicates that the crossing provides leisure access to the local footpath network for 5 users, and 1 person to access their property.
- 2.17.5 Based on location of the crossing point and feedback from public consultation and usage data it is considered that the crossing is used regular by a relatively moderate number of people mainly to access the wider footpath network.
- 2.17.6 The proposed alternative route can be seen on drawing number MMD-367516-C22-GEN-005, which can be found in Appendix F of core document reference **NR26**.
- 2.17.7 This crossing will be closed to public users with private user rights to be retained. Public users will be diverted to a route under the railway bridge to east of the crossing. The new 2m wide footpath will have gravel/stone surfacing. The additional total length of the diversion route is approximately 170m and it maintains links between the public rights of way on both sides of the railway.
- 2.17.8 Following a scoping study, a Diversity Impact assessment was not considered necessary at this crossing due to the current restricted accessibility of the existing crossing route.
- 2.17.9 The level crossing lies on a long distance footpath, the Ouse Valley Way, which provides a link between Huntingdon and Ely over 30km in length. There are ongoing long distance routes to the north via the Fen Rivers Way.
- 2.17.10 The proposals at C22 have been discussed in 5 workshops with the local highway authority. Officers have not objected to the proposal.
- 2.17.11 During the design development following round 1 consultation CCC sought clarification on potential flooding for the proposed footpath. CCC suggested that support could be obtained if evidence was provided that the diversion route would be usable the majority of the time and only closed during exceptional events. The Environment Agency confirmed via email that their historic flood maps outlining flood events between 1946-2007 do not show flood events that affect the proposal at this crossing.
- 2.17.12 Following the meeting on 2nd August 2016, CCC provided details about the Ely Southern Bypass project, which is a separate scheme from the Anglia Level Crossing Closures, and is located north of C21 Newmarket Bridge level crossing. The information shared was assessed to determine whether a diversion route could be incorporated into the proposed scheme. However,

no viable option was determined and CCC agreed that as the design stood it would not be possible to achieve an alternative.

- 2.17.13 Following discussions with CCC the surfacing of the proposed footpath was proposed to be gravel/stone to mitigate council concerns that the path may become unsuitable should any flooding occur.
- 2.17.14 Following consideration of use of the existing route across the Level Crossing and the assessment of the proposed alternative in terms of impacts on the environment, users and other impacted parties, I am satisfied that the proposed route is suitable and convenient when considered in the context of the purpose and characteristics of the existing route.

2.18 C25 Clayway

- 2.18.1 Clayway crossing is located in a residential area on the eastern outskirts of Littleport. The crossing is located on public footpath 11 which runs in a south easterly direction through the residential area, crosses Sandhill, a public road running parallel to the railway to the east, and joins footpath 15 and 21 approximately 50m east of the crossing. The latter two footpaths run north to south along the west bank of the River Great Ouse, which is located approximately 50m east of the crossing at its nearest point.
- 2.18.2 The level crossing itself is accessed via stiles and narrow grassed alleyways, thereby potentially limiting those with mobility impairments, visual impairments and those travelling with children in pushchairs from using the crossing. However, it does not provide access that would otherwise be denied, as there is a route via the road to access the other side of the track.
- 2.18.3 The need for new data was identified at Clayway and a nine-day census survey to be in accordance with Network Rail Standard GRD007 was subsequently commissioned to take place between the 18th and 26th of June 2016. During the nine-day survey period, which included two weekends, a total of 119 pedestrians were recorded using the level crossing with the busiest day being Tuesday 21st June 2016 when 24 adult and 2 child pedestrians were recorded.
- 2.18.4 Of the 9 people that provided feedback during the first round of public consultation, 1 used it daily, 3 indicated that they used the crossing weekly, 3 used it monthly and 2 used it rarely. Feedback indicates that the crossing provides leisure access to the local footpath network for 8 people and 1 user to access school.
- 2.18.5 Based on location of the crossing point and feedback from public consultation and usage data it is considered that the crossing is used regular by a moderate number of people to mainly access the wider footpath network.
- 2.18.6 The proposed alternative route can be seen on drawing number MMD-367516-C25-GEN-005, which can be found in Appendix F of core document reference **NR26**.
- 2.18.7 Existing public rights over the level crossing to be extinguished. Crossing users would make use of Sandhill level crossing to the north. The diversion will make use of Padnal Road and a new 2m wide asphalt footway approximately 12m in length adjacent to the highway on Victoria Street will be created to the west of Sandhill level crossing. The diversion route on the east side of the crossing will make use of footpath 21 or the existing track along Sandhill to connect users to Sandhill level crossing. A 2m wide footpath will be created on a private track to link the northern end of footpath 21 to the adopted highway on the east side of the crossing. Footpath 11 to Clayway crossing on the west of the railway will be extinguished (approximately 100m in length) to prevent the creation of a dead end, but it is retained on the east side of the crossing to maintain the link between Sandhills and footpath 21

- 2.18.8 Following a scoping study it was noted that there may be some potential negative implications of the proposed diversion route, such as road walking. However, due to current problems with accessibility (primarily the presence of stiles), permanent diversion is likely to improve accessibility and so no DIA was required.
- 2.18.9 The total length of the diversion route is 300m, however, the origin and destination points will affect the overall diversion length for many users.
- 2.18.10 The level crossing provides a link to the east side of Littleport and there are ongoing public rights of way routes for approximately 1.3km from the level crossing within the urban environment of Littleport. This connectivity terminates at Ely Road. To the east of the level crossing the footpath provides a link to the long Distance Fen Rivers Way, or alternatively pedestrians can use Sandhill to access Victoria Street.
- 2.18.11 The diversion north to Sandhill road level crossing was the only option considered but the design was amended during the scheme development to mitigate issues raised during consultation regarding the road walking on Victoria Street at Sandhill crossing.
- 2.18.12 The proposed route was subject to a Stage 1 Road Safety Audit carried out in line with HD19/15 and by an independent team remote from the option development design team.
- 2.18.13 The Audit identified a risk of vehicle to pedestrian collisions on Padnal Road. This is due to users crossing Padnal Road a location where dropped kerbs are not provided. The proposed diversion route will guide pedestrians along the eastern side of Padnal Road where the footway terminates just south of Hyde Park. It was therefore recommended that a crossing point with dropped kerbs is provided where the eastern footway terminates. The design team agreed that this would be provided as part of the detailed design proposals
- 2.18.14 Nine day Automatic Traffic Count data (see **Document NR32/2 at Tab 1**) was collected in June 2016 on Victoria Street, that showed an average 2 way daily traffic flow of 3583 vehicles and 85th percentile speed of vehicles of 25.4mph where the posted speed limit is 30mph.
- 2.18.15 The proposals at C25 have been discussed in 5 workshops with the local highway authority. Officers have objected to the proposals.
- 2.18.16 Feedback from the round 1 public consultation suggested use of the track parallel to the railway known as Sandhill (track). CCC stated that this is an unclassified adopted road and users can use this route currently. CCC believed that the proposal was effectively an extinguishment only and would prefer to have a form of mitigation in place to off-set the loss of the public right of way.
- 2.18.17 From the strategic stakeholder comments, it was acknowledged that a previous proposal to close to the level crossing in 2005 had not passed through public inquiry as the road crossing at Sandhill level crossing was considered to be less safe than the footpath crossing.
- 2.18.18 A new 2m wide asphalt footway adjacent to the highway on Victoria Street was designed at Sandhill level crossing to address safety concerns. It was acknowledged that provision for dropped kerbs on Padnal Road would need to be considered at detailed design stage following discussions with CCC. Following round 2 consultations it was proposed to create a 2m wide footpath on an existing private track to link the northern end of footpath 21 to the adopted highway on the east side of the railway.
- 2.18.19 Following consideration of use of the existing route across the Level Crossing and the assessment of the proposed alternative in terms of impacts on the environment, users and other

impacted parties, I am satisfied that the proposed route is suitable and convenient when considered in the context of the purpose and characteristics of the existing route.

2.19 C26 Poplar Drove and C27 Willow Road

- 2.19.1 These two crossings have been considered together as they share a single diversion solution.
- 2.19.2 Poplar Drove runs in a north west axis from Ten Mile Bank on the east of the railway to join byway 31 to the west of the railway. Poplar Drove is surfaced with tarmac to the east of the level crossing, and has an unsealed hard surface to the west of the level crossing. Poplar Drove is adopted highway although the section over the railway is not adopted, but is currently open to all traffic. Network Rail's view is that the level crossing itself is a private (occupation) crossing, but this is disputed by the highway authority, which claims the crossing is a public road, in line with the status of the road on either side of the railway.
- 2.19.3 The approach to C26 on either side is via a relatively flat, well-used road of varying quality of surface treatment, clear of any obstructions, cutting across agricultural fields. The crossing consists of a wide gate on either side suitable for vehicular use, and there are visible safety signs close by. Access is not impaired for users with mobility or visual impairments, however opening and closing the large gate safely may cause issues for parents with pushchairs and small children.
- 2.19.4 The need for new data was identified at C26 Poplar Drove and a nine-day census survey in accordance with Network Rail Standard GRD007 was subsequently commissioned to take place between the 18th and 26th of June 2016. Following the completion of data analysis from this level crossing it was noted that footage had been lost due to equipment failure on Saturday 18th June 2016 and subsequently additional data was collected on Saturday 2nd July 2016. During the nine-day survey period, which included two weekends, a total of 4 pedestrians and 6 cyclists were recorded using the level crossing with the busiest day being Sunday 19th June 2016 when 4 pedestrians and 1 cyclist were recorded. Vehicle usage of this level crossing was also recorded through this survey with a total of 12 vehicles being recorded over the nine-day period with a maximum of six motorcycles using the crossing on Sunday 26th June 2016.
- 2.19.5 Of the 6 people that provided feedback for C26 during the first round of public consultation, 4 used it weekly and 2 used it monthly. 3 people used it for property access, 2 for leisure and 1 other use
- 2.19.6 On completion of the consultation exercises involving both the public and Cambridgeshire County Council, it was identified that additional usage data would be beneficial to the study, and as C26 Poplar Drove is understood to be a private (occupation) crossing it was agreed with Network Rail that the Private Users for this level crossing would be issued with a questionnaire. This questionnaire sought to capture not only the average use of the level crossing but also whether there were any times of the year when usage peaked, such as during the harvesting season for example.
- 2.19.7 Nine private users of Poplar Drove were sent questionnaires and eight users provided a response, which are set out below

Private User Ref	Poplar Drove Level Crossing Usage
1	Per week: - 5 single tractors

	<ul style="list-style-type: none"> - 30 tractors with attachments - 1 combine/large agricultural vehicle - 1 tracked vehicle
2	<p>Monthly:</p> <ul style="list-style-type: none"> - 10 to 12 adult pedestrians - 6 to 8 child pedestrians - 4 cars <p>Noted usage is seasonal over 7 months a year</p>
3	Very infrequent car usage
4	Very infrequent adult pedestrian usage
5	<p>Monthly:</p> <ul style="list-style-type: none"> - 2 adult pedestrians - 2 equestrians - 6 animals on the hoof - 2 cars <p>Seasonal van/lorry over 3.5 tonnes use</p> <p>Very infrequent motorcycle use</p>
6	<p>Daily:</p> <ul style="list-style-type: none"> - 4 adult pedestrians - 2 child pedestrians - 2 adult cyclists - 4 child cyclists - 4 cars - 2 motorcycles - 3 van / small lorry <p>Vehicles associated with agriculture usage on a monthly basis up to 20 times a day for each vehicle type.</p> <p>Noted that the crossing is frequently used by dog walkers each month.</p>
8	<p>Weekly:</p> <ul style="list-style-type: none"> - 2 to 3 adult pedestrians - 3 to 4 cars - 3 single tractors - 3 tractors with trailers
9	Weekly:

	<ul style="list-style-type: none"> - 2 cars - 1 quad bike - 3 single tractors - 1 tractor with trailer <p>Noted that seasonal variation includes tractors with trailers for different crops as follows:</p> <ul style="list-style-type: none"> - Wheat = 3 trailers per season - Potatoes = 10 trailers per season - Sugar beet = 10 trailers per season
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- 2.19.8 Based on location of the crossing point and feedback from public consultation and usage data it is considered that the crossing is used infrequently by a small number of people to access the wider footpath network. It was considered that there was generally infrequent use by a small number of vehicles use of the level crossing, but there might be periods when there is more frequent use.
- 2.19.9 At C27 the existing byway 32 leads from Horsley Hale on a north-east axis to byway 31 (Poplar Drove) and in turn to byway 30 (Willow Row Drive). Willow Row Drive crosses the railway at Willow Row/Willow Road level crossing to connect to the Ten Mile Bank, located approximately 500 m east of the existing level crossing along the River Great Ouse. Willow Row Drive has an unsealed surfaced is currently open to all traffic. Byway 31, Poplar Drove, runs 450 m south west of and parallel to Willow Row Drive. These byways cross through existing agricultural fields and there are a number of dry ditches along the field boundaries, some of which cross under the existing byways.
- 2.19.10 The approach to the C27 level crossing on either side is via a degrading gravel road and through a large metal gate, which is required to be locked after use. The crossing itself is generally flat and clear of vegetation and obstacles.
- 2.19.11 On completion of the consultation exercises involving both the public and CCC, it was identified that additional traffic data would be beneficial to the study and a new census survey was commissioned at C27 Willow Row level crossing. A nine-day census survey to be in accordance with Network Rail Standard GRD007 was subsequently commissioned to take place between the 7th and 15th January 2017. Following the completion of data analysis from this level crossing it was noted that footage had been lost due to equipment failure on Saturday 7th January and additional data was collected on Saturday 21st January to replace it. During the nine-day survey period, which included two weekends, a total of 10 pedestrians were recorded using the level crossing with the busiest days being Monday 9th January 2017 when 6 pedestrians were recorded. A total of 21 vehicles were also recorded during the nine-day survey period with the busiest days being Tuesday 10th and Wednesday 11th January 2017 when 5 vehicles were observed on each of the days.
- 2.19.12 Of the 6 people that provided feedback for C27 during the first round of public consultation, 1 indicated that they used the crossing daily, 2 used it weekly, 2 used it fortnightly and 1 used it monthly. Of the 5 who responded, leisure use for the level crossing was cited.
- 2.19.13 Based on location of the C27 crossing point and feedback from public consultation and usage data it is considered that the crossing is used infrequently by a small number of people to access the wider footpath network.
- 2.19.14 The proposed alternative route can be seen on drawing number MMD-367516-C26-GEN-005 and MMD-367516-C27-GEN-005, which can be found in Appendix F of core document **NR26**.

- 2.19.15 At C26 Poplar Drove the public rights over the level crossing will be downgraded to a byway with a TRO provided between prescribed points for a width of 1.525m. Private vehicle rights will be given to the necessary parties. Any other public motorised vehicles will be diverted to the A10 to the South. The existing telephone will remain and a locked vehicular gate and bridleway gates will be provided. A new 3m wide unsurfaced bridleway, approximately 500m long will be provided running north from Poplar Drove crossing on the east side of and adjacent to the railway, connecting into Willow Row Drive.
- 2.19.16 Following a scoping exercise it was noted that although public vehicular users of the C26 crossing will be required to travel considerably further, this impact is unlikely to be felt disproportionately. A DIA is not required as no alterations to pedestrian access is anticipated for any protected characteristic group.
- 2.19.17 At C27 the existing public rights over the level crossing to be extinguished. Motorised users would have to make use of Poplar Drove (C26) crossing if registered, and public motorised users would be diverted to Littleport Bypass level crossing to the south. A new 3m wide unsurfaced bridleway, approximately 500m long, will be provided running south from Willow Row/Willow Road level crossing on the east side of and adjacent to the railway, connecting into Poplar Drove. A steel 8m in length bridleway bridge will be required along the new proposed footpath to cross a drainage ditch. The existing byway 30 (approximately 470m in length) will be downgraded to a bridleway. The surface of the section of byway 31 on the west side of the railway, which runs between Willow Row Drove and Poplar Drove, will be improved with gravel/stone where necessary.
- 2.19.18 Following a scoping exercise for C27 it was noted that although public vehicular users of the crossing will be required to travel considerably further, this impact is unlikely to be felt disproportionately. A DIA is not required as no alterations to pedestrian access is anticipated for any protected characteristic group.
- 2.19.19 PROW users of C26 will not experience any increase in journey length.
- 2.19.20 The total length of the bridleway diversion route for PROW users of C27 is approximately 1.38km, however, the origin and destination points will affect the overall diversion length for many users. The new route to the west of the level crossing using C26 Poplar Drove maintains north south links over the railway using bridleways, byways and rural roads, as does the original route. Depending on the origin and destination points, the route is longer than existing, however, as it provides leisure walking it is considered acceptable.
- 2.19.21 The proposal route shown at round 1 consultation (see **Document NR32/2 at Tab 2**) was subject to a Stage 1 Road Safety Audit. The Audit Team reported the following:
- 2.19.22 *It was identified that no footways are provided along this section of the A10 and although there is a relatively flat wide verge, there are a number of signs placed within the verge which could force pedestrians into the carriageway. The A10 is a primary route and vehicle speeds and traffic flows were observed to be high, which may give drivers limited time to react to pedestrians within the carriageway. This could result in a conflict between pedestrians and vehicles. It was recommended that a footway should be provided for pedestrians.*
- 2.19.23 In response to the issue raised, the design team amended the design to enable pedestrians to cross the railway at C26 Poplar Drove level crossing to avoid the A10.
- 2.19.24 The proposals at C26 and C27 have been discussed in 5 workshops with the local highway authority. Officers have objected to the final alternative diversionary route.

- 2.19.25 At round 1 the proposals were to extinguishment of rights at C26 Poplar Drove level crossing and downgrade C27 Willow Row / Willow Road level crossing to a private user worked level crossing with a footpath. Public motorised users would be diverted via Ten Mile Bank, the A10 and Horsley Hale. This was subsequently discounted due to private rights requirement at either C26 Poplar Drove or C27 Willow Row / Willow Road level crossing and a request by CCC to provide a bridleway over the level crossing. The proposals were subsequently modified for round 2 which showed an extinguishment of public rights at C26 Poplar Drove level crossing. Private user rights would be retained. It was proposed to downgrade C27 Willow Row / Willow Road level crossing to a private user worked level crossing with a bridleway. Public motorised users would be diverted via Ten Mile Bank, the A10 and Horsley Hale.
- 2.19.26 Further discussions followed round 2 consultation where it was noted that CCC would prefer to retain rights over C27 Poplar Drove level crossing for cyclists and motorbikes. It was acknowledged that a Traffic Regulation Order (TRO) with a width restriction and prohibition of 4 wheeled vehicles may be required. To mitigate loss of access for non-motorised users and through discussion with CCC a proposal to create a circular bridleway route was considered that would involve a new Bridleway link along eastern side of railway between the two crossings and downgrading BOAT 30 to a bridleway between Willow Road Drive and the level crossing, however, it was determined that it would not be viable within the scope of this project to down grade the full extent of BOAT 30 due to the need to retain existing accesses. Consequently, the design was amended to only downgrade part of BOAT 30 close to C27 Willow Row / Willow Road level crossing and retain existing rights along BOAT 30.
- 2.19.27 The design freeze proposal was to remove all alleged public rights over C27 Willow Row / Willow Road level crossing. Downgrade C26 Poplar Drove level crossing to a private user worked level crossing and a byway with a Traffic Regulation Order (TRO) provided between prescribed points for a width of 1.525m. The existing user worked level crossing gates will remain and locks would be added. Motorised users of both C26 Poplar Drove and C27 Willow Row / Willow Road would make use of C26 Poplar Drove level crossing if registered as permitted private users of the crossing, and public motorised users would be diverted to Littleport Bypass level crossing to the south using existing adopted road. A new 3m wide unsurfaced bridleway, approximately 500m long, will be provided running south from C27 Willow Row / Willow Road level crossing on the east side of and adjacent to the railway, connecting to C26 Poplar Drove level crossing. A steel bridleway bridge, approximately 8m in length will be required along the proposed bridleway to cross a drainage ditch. The existing Byway 30 (approximately 100m in length) will be downgraded to a bridleway to the east of C27 Willow Row / Willow Road level crossing. Surfacing of the section of Byway 31 on the west side of the railway, which runs between Willow Row Drove and Poplar Drove, will be improved with gravel/stone where necessary.
- 2.19.28 In line with best practice guidance for Transport and Works Act orders, and as part of the ongoing consultation process, it was recommended that any proposals which had undergone significant changes since Round 2 should have 'Public Information' updates issued. It was considered that C26 and C27 were in this category.
- 2.19.29 As a result, further engagement with the public was undertaken in December 2016 as shown in Document **NR32/2 at Tab 4**.
- 2.19.30 In response to the TWAO submission different alternative routes or concepts was suggested by Objectors as part of the TWAO process. These have been assessed further and the considerations are presented in **Document NR32/2 at Tab 7, page 195 and 202**.

- 2.19.31 Following consideration of use of the existing route across the Level Crossing and the assessment of the proposed alternative in terms of impacts on the environment, users and other impacted parties, I am satisfied that the proposed route is suitable and convenient when considered in the context of the purpose and characteristics of the existing route.

2.20 C28 Black Horse Drove

- 2.20.1 Black Horse Drove is a public road that runs from Ten Mile Bank to the east, crossing the railway at Black Horse Drove level crossing, to a point approximately 240m to the west of the railway, where it becomes a private road which is gated to prevent public access. The road crosses through agricultural fields and alongside a number of farm and residential buildings. The majority of residential building are on the east of the level crossing.
- 2.20.2 The eastern approach to the level crossing is along Black Horse Drove, a tarmac road off Ten Mile Bank and, apart from not having a dedicated footpath, does not pose specific restrictions for user groups. The approach from the west is similarly via a tarmac road; however this road for private use. Pedestrians approaching the crossing from this direction currently walk along a grass verge or alternatively walk in the carriageway itself before accessing the pedestrian gate. The pedestrian gates on both sides of the track are located on the right hand side of the vehicular gate. This means that non-motorised users must follow a diagonal trajectory to access the exiting gate. This may increase the length of time spent on the railway for people crossing with mobility impairments such as disabled and older people, and may potentially result in wheels of pushchairs or wheelchairs/mobility scooters getting trapped in the grooves of the railway line.
- 2.20.3 The need for new data was identified at Black Horse Drove and a nine-day census survey to be in accordance with Network Rail Standard GRD007 was subsequently commissioned to take place between the 18th and 26th of June 2016. During the nine-day survey period, which included two weekends, a total of 105 pedestrians were recorded using the level crossing with the busiest day being Saturday 18th and Friday 24th when 18 pedestrians were recorded. A total of 145 vehicles were recorded using the crossing during the survey period. A maximum of 31 vehicles used the crossing on a single day during the survey period which was recorded occurring on Saturday 18th June 2016.
- 2.20.4 Of the 5 people that provided feedback on C28 during the first round of public consultation, 1 indicated that they used the crossing daily, 1 that they used it weekly, 1 used it monthly and 2 used it rarely. 1 respondent indicated that the crossing provides access to local amenities and 1 that it provides access to their own property. 3 cited Other reasons.
- 2.20.5 Based on location of the crossing point and feedback from public consultation and usage data it is considered that the crossing is used regularly by a moderate number of people to access property, the wider road network and local amenities.
- 2.20.6 The proposed alternative route can be seen on drawing number MMD-367516-C28-GEN-005, which can be found in Appendix F of core document **NR26**.
- 2.20.7 All public rights would be extinguished at the crossing although public road will continue on either side. The crossing will become a private user worked crossing for registered users. A turning head will be provided on the east side of the railway.
- 2.20.8 Non registered vehicular users would be diverted on alternative routes via the local road network to the half barrier Littleport bypass road level crossing on the A10. This would be via Ten Mile Bank to the east of the railway, Camel Drove Hale Drove and Hale Fen to the west of

the railway. There is no connectivity to any existing public rights of way from Black Horse Drove on the west side of the railway.

- 2.20.9 An Equality and Diversity Overview Report was prepared to analyse the accessibility of the existing level crossing and the proposed alternative provision. This more detailed consideration of equalities issues recommended that a full Diversity Impact Assessment was undertaken. The DIA concluded that due to the availability of the alternative route in the local area to cross the railway, closure and redirection along the proposed diversion route is considered an appropriate solution. However, there were further points raised as potential actions for which consideration should be given. These are recorded in the table below:

DIA Action	Project Team Response
Ensure appropriate signage is included along appropriate sections of the A10, alerting potential users to the change in status of the road and the level crossing, to prevent confusion.	Advance signage forms part of the proposals. The details of which can be discussed with the Highway Authority at the detailed design stage
Develop a communication strategy to ensure that local residents and walking/leisure groups are kept abreast of developments, including the scheduling of works, and any details of potential benefits of the scheme, particularly focussing on user safety.	NR to undertake this at detailed design and/or implementation stage.
Consider holding further consultation with local residents, the local highway authority and other stakeholders regarding the future maintenance of Black Horse Drove if the road is downgraded to a private road.	NR to undertake this at detailed design and/or implementation stage.
Consider providing level crossing safety sessions to those who have registered as users of Black Horse Drove level crossing to ensure that users are aware of crossing safety	NR to undertake this at detailed design and/or implementation stage. Level Crossing Manager to be involved
Review the DIA at every GRIP stage to ensure that equality of access is maintained for all	NR to undertake this at detailed design and/or implementation stage.

- 2.20.10 The pre-feasibility option assessed from the Network Rail Route Requirement Document (RRD), which is appended to the proof of Andy **Kenning NR30/2 at Tab 1**, was to downgrade the level crossing to a public footpath level crossing with a private vehicular access for registered users. Prior to the first round of consultation Mott MacDonald was instructed by Network Rail to remove public access over the level crossing and proceed with downgrading the level crossing to a private user worked level crossing.
- 2.20.11 No other options were considered other than downgrading the level crossing to private use. However, discussions with the local authority resulted in some amendments to the proposals which is detailed in section 2.20.15.
- 2.20.12 The proposal route was subject to a Stage 1 Road Safety Audit and the RSA team concluded that there were no issues associated with the proposals.
- 2.20.13 The proposals at C28 have been discussed in 5 workshops with the local highway authority who have not objected to the proposals.
- 2.20.14 The level crossing is close to the border with Norfolk and therefore Norfolk County Council were consulted with regarding the proposals. They had no objection to the proposals.

- 2.20.15 Following Round 1 consultation it was noted that the local authority would seek to reduce maintenance liability for the short section of public highway on the west side of the railway which it was suggested could be downgraded to a private track. This was shown on the round 2 consultation plan which can be seen in **Document NR32/2 at Tab 3**.
- 2.20.16 Following assessment it was decided that the section of adopted highway to the west of the level crossing should remain as adopted highway on the following grounds:
- a. Additional significant undue burden would be placed on a number of landowners and residents
 - b. It would be difficult to determine and agree who would have rights to the land and who would be directly responsible for maintaining the private track
 - c. The adopted highway exists currently and rights could be obtained by the local authority to undertake any maintenance as required.
 - d. The value of land and property could be influenced by downgrading the adopted highway.

For these reasons the proposals were amended to retain the section of public highway on the west side.

- 2.20.17 Following consideration of use of the existing route across the Level Crossing and the assessment of the proposed alternative in terms of impacts on the environment, users and other impacted parties, I am satisfied that the proposed route is suitable and convenient when considered in the context of the purpose and characteristics of the existing route.

2.21 C29 Cassells

- 2.21.1 The level crossing is located on the unsurfaced footpath 1 approximately 100m north of the Brinkley Road which links to the A1304 London Road to the west. Footpath 1 runs through a narrow strip of woodland between Brinkley road and Cassells level crossing. On the northern side of the level crossing, footpath 1 runs east adjacent to the railway boundary and unsurfaced footpath 10 runs south-west to Brinkley Road, parallel to the railway, again through a narrow band of woodland and then through a gravelled area informally used as a car park.
- 2.21.2 The approach to Cassells level crossing from the both directions is along an overgrown natural track bordering the adjacent fields. As such access is impeded for older or disabled users, including those with mobility or visual impairments, as well as for parents with pushchairs and young children.
- 2.21.3 The need for new data was identified at Cassells and a nine-day census survey to be in accordance with Network Rail Standard GRD007 was subsequently commissioned to take place between the 18th and 26th of June 2016. During the nine-day survey period, which included two weekends, a total of 2 pedestrians were recorded using the level crossing with the busiest day being Wednesday 22nd June when 2 pedestrians were recorded. Following the completion of data analysis from this level crossing it was noted that footage had been lost due to equipment failure on Sunday 26th June 2016 between 12:15 and 23:30 and that no transcription of data was possible during this time.
- 2.21.4 Of the 2 people that provided feedback during the first round of public consultation, both indicated that they rarely used the crossing. Both responses indicated that the crossing provides leisure use.
- 2.21.5 Based on location of the crossing point and feedback from public consultation and usage data it is considered that the crossing is used infrequently by a small number of people to access the wider footpath network.

- 2.21.6 The proposed alternative route can be seen on drawing number MMD-367516-C29-GEN-005, which can be found in Appendix F of core document **NR26**.
- 2.21.7 Existing public rights over the level crossing are to be extinguished and a diversion route will be provided along Brinkley Road and along the existing footpath to the north-west of the railway line. The existing footpath (approximately 100m in length) that links Brinkley Road to the level crossing will be extinguished. The railway would be crossed at Brinkley Road level crossing which has automatic half barriers. The Brinkley Road section of the diversion route would incorporate a section where the use of existing grass verge to the south of Brinkley Road crossing is required. The verge is considered to be suitable for use and would be maintained by the local authority. From the point where the wide verge ends at the Network Rail access point, a new 2m wide asphalt planings footway, approximately 70m in length, will be created within Network Rail land adjacent to Brinkley Road. To the north of Brinkley Road level crossing, a new section of 2m wide unsurfaced footpath will be created to connect existing footpath 10 to Brinkley Road north of the railway, approximately 20m in length.
- 2.21.8 Following a scoping study, a DIA was not considered necessary at this crossing due to the current restricted accessibility of the existing crossing route.
- 2.21.9 The total length of the footpath diversion route is approximately 180m, however, the origin and destination points will affect the overall diversion length for many users.
- 2.21.10 The footpath which utilises the level crossing provides connectivity to the long distance Icknield Way Trail to the southeast of the level crossing. To the west there are public rights of way which link to the village of Great Wilbraham and Bottishall which are approximately 4km from the level crossing.
- 2.21.11 The alternative/diversionary route retains the connectivity to both sides of the railway via the use of the Brinkley Road automatic half barrier road level crossing.
- 2.21.12 The use of Brinkley Road was subject to a Stage 1 Road Safety Audit. From the audit it was identified that there is a risk of vehicle collisions with pedestrians. It was noted that there is limited verge width along Brinkley Road and pedestrians are likely to be within the carriageway. Observations of vehicle speeds were made which indicated that this may give drivers limited time to react to pedestrians within the carriageway possibly resulting in conflict between pedestrians and vehicles. It was recommended that a footway is provided for pedestrians, which was included in the Round 1 consultation proposal.
- 2.21.13 The proposal shown on drawings MMD-367516-C29-GEN-005, which can be found in Appendix F of core document NR26 was subject to a further Stage 1 Road Safety Audit (see **document NR32/2 at Tab 11**). The Audit Team did not identified any safety issues. The Road Safety Team considered that the proposed provision of a footway/surfaced highway verge to the south of the railway was a benefit. They also considered that the crossing position at the Brinkley Road level crossing provides pedestrians with improved visibility when crossing Brinkley Road compared to the crossing point at the end of Footpath 10 opposite Delamere Close, which was part of the initial proposals that were audited.
- 2.21.14 Nine day Automatic Traffic Count data (see **Document NR32/2 at Tab 1**) was collected in October 2016 on Brinkley Road, just south of the Brinkley Road road level crossing that showed an average 2 way daily traffic flow of 1281 vehicles and 85th percentile speed of vehicles of 43.3mph where the posted speed limit is 40mph. Based on the traffic data and RSA outcome the use of Brinkley Road is considered safe and suitable.

- 2.21.15 The proposals at C29 have been discussed in 5 workshops with the local highway authority. Officers reserved the right to comment on the support or otherwise for the proposal. No changes were made following consultations.
- 2.21.16 Subsequent discussions with CCC and assessment of the space for a new footway have prompted an amendment to the proposal. The option to be taken forward to design freeze is an amended version of the Round 2 consultation plan to include a new section of footpath from footpath 10 north of the railway to Brinkley Road to reduce the length of new footway requirement. The use of Network Rail land to the south of the Brinkley Road road level crossing for a footpath along the section where verge width is not adequate for a footway.
- 2.21.17 The Council suggests that speed reduction measures would be required on the basis that pedestrians would have to cross at the level crossing where there is a kink in the road. This is not the case, as the onward PRoW route is on the other side of the level crossing. Both sides of the level crossing have a space for pedestrians demarked by white lining. Pedestrians are therefore able to walk over the crossing and cross the road at point which maximises visibility in both directions.
- 2.21.18 Following consideration of use of the existing route across the Level Crossing and the assessment of the proposed alternative in terms of impacts on the environment, users and other impacted parties, I am satisfied that the proposed route is suitable and convenient when considered in the context of the purpose and characteristics of the existing route.

2.22 C30 Westley Road

- 2.22.1 The level crossing is located approximately 650m east of the A1304 London Road which it links to via byway 1 which is an unsealed surface route running between agricultural fields lined by trees. To the east of the level crossing is Westley. The level crossing is located approximately 1.5km north-east of Six Mile Bottom and is in the vicinity of a number of properties that are outlying from this hamlet.
- 2.22.2 On both sides, access to the crossing is via a tarmac and gravel single lane road, the surface is mostly flat, though there are small pot holes in places and during heavy rainfall water can pool on the road making the level crossing more difficult to access. The crossing has gates on both sides which may be difficult to open for people with mobility impairments, and older people without assistance.
- 2.22.3 An existing count undertaken in April 2013 for a nine-day period between 20th and 28th April 2013 was assessed to provide good quality data, and as a result no new census surveys were commissioned. During the nine-day survey period, which included two weekends, a total of 39 pedestrians were recorded using the level crossing with the busiest day being Sunday 28th April 2013 when 11 pedestrians and 2 cyclists were recorded. A total of 35 vehicles were recorded using the crossing during the survey period. A maximum of 9 vehicles used the crossing on a single day during the survey period which was recorded occurring on Sunday 21st June 2013.
- 2.22.4 Of the 12 people that provided feedback on C30 during the first round of public consultation, 3 indicated that they used the crossing daily, 3 that they used it weekly, 1 used it fortnightly, 3 used it monthly and 1 used it rarely and one gave no answer. 10 respondents indicated that the crossing provides leisure use and 2 that it was used for commuting.
- 2.22.5 Based on location of the crossing point, feedback from public consultation and usage data it is considered that the crossing is used regularly by a relatively small number of people to access the wider area for leisure purposes. It was considered that there was low, regular vehicle use of the level crossing.

- 2.22.6 The proposed alternative route can be seen on drawing number MMD-367516-C30-GEN-005, which can be found in Appendix F of core document **NR26**.
- 2.22.7 The crossing will be downgraded to a byway level crossing with a vehicular right of way for authorised users only accessing byway 1. The miniature stop lights and telephone would be retained at this crossing after the downgrade. To cross the railway non-authorised vehicles would use the existing highway and Brinkley Road level crossing, which has automatic half barriers. A TRO will restrict the width of the route to 1.525m over the level crossing. New bridleway gates, with mounting blocks and a turning head for vehicles would be provided in addition to the existing gates at the level crossing.
- 2.22.8 There is no change to the use of the level crossing for byway users able to adhere to the proposed width restriction and for private registered users. The full additional length of the diversion route for wider public vehicles is approximately 8.5km, however, the origin and destination points will affect the overall diversion length for many users. It reasonable to assume that for instance residents in Westley Waterness accessing Six Mile Bottom would have an additional 350m journey length. Residents in Westley Waterness wishing to reach the B1303 would have an additional 3.2km journey length.
- 2.22.9 Following a scoping study, a DIA was not considered necessary at this crossing as no amendments are proposed for the pedestrian access.
- 2.22.10 There are no public rights of way to the east of the level crossing and ongoing byways to the west provided links to Great Wilbraham and Bottisham approximately 5km from the level crossing.
- 2.22.11 No other options other than a change of status of the public highway over the level crossing were considered. Through the process of design iterations and development during the consultation rounds the nature of the downgrade has been considered and revised.
- 2.22.12 The initial pre-feasibility consideration as seen in the RRD, which is appended to the proof of Andy Kenning **NR30/2 at Tab 1**, was to downgrade the level crossing to a footpath only. Prior to round 1 consultation it was recognised that all non motorised users would be able to use the public highway and both a bridleway and footpath downgrade were shown (see **Document NR32/2 at Tab 2**).
- 2.22.13 The proposal route was subject to a Stage 1 Road Safety Audit and no issues were identified.
- 2.22.14 Nine day Automatic Traffic Count data (see **Document NR32/2 at Tab 1**) was collected in October 2016 on Brinkley Road, just south of the Brinkley Road road level crossing that showed an average 2 way daily traffic flow of 1281 vehicles and 85th percentile speed of vehicles of 43.3mph where the posted speed limit is 40mph.
- 2.22.15 The proposals at C30 have been discussed in 5 workshops with the local highway authority who have not objected to the diversion.
- 2.22.16 It was noted that turning heads would be provided on both sides of the level crossing.
- 2.22.17 CCC had safety concerns regarding the diversion route along the A1304 London Road and suggested the use of a private underpass adjacent to C30 Westley Road level crossing. However, this was discounted on the grounds of its suitability in terms of headroom clearance and impact on the landowner's business.
- 2.22.18 Following round 2 details regarding provisions at C30 Westley Road level crossing were confirmed and discussed with CCC, who raised concerns over the loss of access for trail riders.

It was proposed that the existing highway would be partially stopped up to create a private user crossing with an adjacent width restricted byway. A Traffic Regulation Order (TRO) would be provided between prescribed points for a width of 1.525m. The existing user worked level crossing gates would remain and locks added. Mounting blocks and bridleway gates would also be proposed.

- 2.22.19 Following consideration of use of the existing route across the Level Crossing and the assessment of the proposed alternative in terms of impacts on the environment, users and other impacted parties, I am satisfied that the proposed route is suitable and convenient when considered in the context of the purpose and characteristics of the existing route.

2.23 C31 Littleport Station

- 2.23.1 It should be noted that this project is concerned with closure of the Littleport underpass to vehicular traffic to facilitate a segregated route for pedestrians to access the eastern platform at Littleport Station as and when the Network Rail Kings Lynn Service Enhancement scheme is implemented. The Kings Lynn service enhancement scheme will deal with the closure of the barrow crossing within Littleport Station.
- 2.23.2 The Littleport Station crossing is located immediately north of Littleport station and connects the station access road on the west side of the railway to the Cambridge bound platform. The access road runs northwards to the station from Station Road, a public highway approximately 80m south of the crossing.
- 2.23.3 The accessibility of the crossing is good. The western platform is fully accessible, with both stepped and ramped options for users. Level crossing furniture is present across the entire railway line, posing little restriction for any users. The lack of access gates at the level crossing further mitigates any accessibility restrictions, however this may result in reduced safety at the site.
- 2.23.4 Of the 31 people that provided feedback during the first round of public consultation, 11 indicated that they used it daily, 6 indicated that they used the crossing weekly, 9 used it monthly and 5 people rarely used. Feedback indicates that the crossing provides commuting use for 11 users, 8 person used it to for leisure purposes, 3 used it to access their own property, 2 to access local amenities and 7 people gave Other as a reason.
- 2.23.5 The level crossing is on the train station and only provides access to platforms either side railway and therefore it is considered that the purposes stated are generally the final use of the train journey. A high number of people use this crossing.
- 2.23.6 The need for new data was identified at Littleport Station and two Automatic Traffic Count (ATC) surveys with pedestrian census usage were subsequently commissioned to take place at the underpass adjacent to Station Road and near the level crossing on Station Road. These surveys were undertaken for a period of nine-days between 18th to 26th June 2016.
- 2.23.7 On completion of the consultation exercises involving both the public and Cambridgeshire County Council, it was identified that additional traffic data would be beneficial to the study.
- 2.23.8 A technical note has been prepared setting out the survey and transport assessment work carried out and this can be found in document **NR32/2 at Tab 13**
- 2.23.9 From the analysis it was concluded that the underpass is currently used by a relatively low number of vehicles and its closure it expected to have minimal impact on the operation of the external highway network.

- 2.23.10 The proposed alternative route can be seen on drawing number MMD-367516-C31-GEN-005, which can be found in Appendix F of core document reference **NR26**.
- 2.23.11 At Littleport Station the existing carriageway beneath the railway underbridge will be restricted (by bollards) to use by non-motorised users only via a new raised footway (approximately 30m in length). These works will, with the station works proposed under the Network Rail Kings Lynn Service Enhancement scheme, enable grade-separated access to the station platforms from each side of the railway.
- 2.23.12 It was noted that the underpass meets standards outlined by the Department for Transport. The diversion potentially includes sections with gradients of around 13%. This is steeper than the current route gradient and may be challenging for older people, wheelchair users, or parents with pushchairs.
- 2.23.13 An Equality and Diversity Overview Report was prepared to analyse the accessibility of the existing level crossing and the proposed alternative provision. This more detailed consideration of equalities issues recommended that a full Diversity Impact Assessment was undertaken. The DIA concluded that due to the availability of the alternative route in the local area to cross the railway, closure and redirection along the proposed diversion route is considered an appropriate solution. However, there were further points raised as potential actions for which consideration should be given. These are recorded in the table below:

DIA Action	Project Team Response
Ensure that the underpass is pedestrianised to mitigate any negative implications.	<p>The pedestrianisation (removal of motor vehicles with cyclists still allowed) of the underpass is included within the order powers.</p> <p>Access restricted to NMU only by the installation of bollards or similar. A proposed raised footway would be provided beneath the railway.</p> <p>The closure of the underpass is supported by the Highway Authority</p>
The Department for Transport (DfT) states that underpasses should be as wide as possible to give sufficient room for disabled users, and ensure a sense of security. The DfT recommends that to achieve inclusive mobility for new or enhanced underpass infrastructure, designers should aspire to a width of at least 4.8 metres and a headroom of 3 metres, or as close to these parameters as reasonably practicable / deliverable. These recommendations will be considered during the detailed design stage. Within the underpass, handrails set at 1000mm above the walking surface should be provided on both sides. There should be a clear view from one end to the other and a good level of lighting. CCTV cameras should also be placed in underpasses to enhance security. Notices to the effect that CCTV is in operation should deter vandals and provide a measure of comfort to pedestrians.	<p>The underpass is a significant structure and to alter it would be difficult to justify. The current dimensions of 4.5m wide x 2.5m high are only slightly less than the DfT recommendations. Given the current underpass is shared with vehicles the proposals represent a significant improvement in safety.</p> <p>Handrails and lighting could be provided as part of the detailed design. This will require further discussion with the highway authority.</p> <p>The provision of CCTV is not deemed necessary as the underpass is currently open to the public and has no CCTV.</p>
Improvements should also be made to disabled parking and ticket machines at the station	To be considered as part of the Network Rail Kings Lynn Service Enhancement scheme

DIA Action	Project Team Response
Develop a communication strategy to ensure that local residents and station users are kept abreast of developments, including scheduling of works, details of enhancements and improvements, and any other benefits of the scheme, particularly focussing on user safety.	Network Rail project team to implement
Review the DIA at every GRIP stage to ensure that any changes to the design do not worsen the access and they improve where appropriate.	NR to undertake this at detailed design and/or implementation stage.

2.23.14 The proposals at C31 have been discussed in two workshops with the local highway authority who have not objected to the diversion.

2.23.15 Following consideration of use of the existing route across the Level Crossing and the assessment of the proposed alternative in terms of impacts on the environment, users and other impacted parties, I am satisfied that the proposed route is suitable and convenient when considered in the context of the other Network Rail enhancement schemes and the traffic assessment carried out for closure of the underpass to vehicles.

2.24 C35 Ballast Pit

2.24.1 C35 Ballast Pit level crossing lies approximately 3000m southwest of C01 and provides private access to a fishing lake on the west side of the railway. The track runs across agricultural land and links to Long Drove approximately 120m to the east of the level crossing.

2.24.2 The eastern approach to the crossing is via an undulating dirt road. This can be particularly muddy and waterlogged during rainy periods. There is also a moderate gradient on the approach on either side of the level crossing. Though wide grass verges are present alongside the road, they may limit access due to mud and uneven terrain. Due to these issues, the accessibility of this crossing is limited, potentially restricting access for people with mobility impairments. The crossing provides direct access into farm land and private fishing ponds, and the western approach requires individuals to walk through uneven terrain – posing similar constraints as the eastern approach.

2.24.3 As Ballast Pit is a private user worked crossing, a new census survey was not considered necessary at this location and it was agreed with Network Rail that the Private Users for this level crossing would instead be issued with a questionnaire. This questionnaire sought to capture not only the average use of the level crossing but also whether there were any times of the year when usage peaked, such as during the harvesting season for example. The Private Users of Ballast Pit indicated that the crossing was used by an average as follows:

- 6 adult pedestrians monthly
- 2 single tractors monthly
- 4 van/small lorry up to 3.5 tonnes very infrequently
- 6 tractors with trailers or large attachments very infrequently

2.24.4 One of the Private Users also noted that tractors with trailers or large attachments used the crossing seasonally in August, September and October, and that the crossing was used infrequently by all of the classifications of users and vehicles.

- 2.24.5 Of the 3 people that provided feedback during the first round of public consultation, 1 indicated that they never use the crossing and 1 used it weekly. 1 respondent stated that they used it for access to their own property.
- 2.24.6 Based on the location of the crossing point and feedback from public consultation it was considered that it would mainly provide regular access to private property for a small number of farm vehicles and pedestrians.
- 2.24.7 The proposed alternative routes can be seen on drawing number MMD-367516-C35-GEN-005 which can be found in Appendix F of core document **NR26**.
- 2.24.8 Existing private rights over the Ballast Pit level crossing are to be extinguished and there are no existing public rights at this level crossing. In order to cross the railway a combination of private farm tracks and adopted highway would be used to divert to Bannolds level crossing, which has automatic half barriers. The existing track to the west of Ballast Pit (approximately 290m in length) will become a Private Road with a culvert over the watercourse, to connect into byway 14.
- 2.24.9 The proposed diversion maintains the east west connectivity. The total additional length of the at C35 diversion route is approximately 2800m, however, the origin and destination points will affect the overall diversion length for many users.
- 2.24.10 Due to current accessibility problems, a DIA is not required.
- 2.24.11 A Road Safety Audit was also undertaken proposal shown at round 1 consultation C35 Ballast Pit level crossing. The Audit Team did not identify any road safety related issues associated with the scheme.
- 2.24.12 The proposals at the level crossing have been discussed in five workshops with the local highway authority. Officers have objected to the farm vehicle use of public roads and byways at C35. However, it is considered that there will be minimal impact on the existing road network due to the very infrequent use of the crossing by large vehicles.
- 2.24.13 Following consideration of use of the existing routes across the level crossings and the assessment of the proposed alternative in terms of impacts on the environment, users and other impacted parties, I am satisfied that the proposed route is suitable and convenient when considered in the context of the purpose and characteristics of the existing route.

3 **Witness declaration**

I hereby declare as follows:

- (i) This proof of evidence includes all facts which I regard as being relevant to the opinions that I have expressed and that the Inquiry's attention has been drawn to any matter which would affect the validity of that opinion.
- (ii) I believe the facts that I have stated in this proof of evidence are true and that the opinions expressed are correct.
- (iii) I understand my duty to the Inquiry to help it with matters within my expertise and I have complied with that duty.

Susan Tilbrook
October 2017