

Mott MacDonald

REFERENCE APP/22

**THE FELIXSTOWE BRANCH LINE AND
IPSWICH YARD IMPROVEMENT ORDER INQUIRY
SUMMARY PROOF OF EVIDENCE
Of
Richard Spoors**



This proof of evidence relates to the implications of the following application:

An application under section 1 of the Transport and Works Act 1992 for works to improve Ipswich Yard through the provision of new sidings and other associated works between London Road Bridge and Ipswich railway station and to construct a second railway line in alignment with and to the southern side of the existing Felixstowe Branch Line from a point west of Mile Post 78.5 on the Branch Line to a point east of the railway platforms at Trimley station, to include works to level crossings along the Branch Line, made on 13 December 2005 and including the revisions and amendments submitted to the Secretary of State for Transport on 5 May 2006.

Application reference:

TWA 05/APP/04

The Felixstowe Branch Line and Ipswich Yard Improvement Order Enquiry

Summary Proof of Evidence

Introduction

The Proof of Evidence which is summarised in this document relates to the implications of a planning application under the Transport and Works Act 1992 for improvement works to Ipswich Yard and the Felixstowe Branch Line of Network Rail. The Planning Reference is TWA 05/APP/04 and made on 13 December 2005 and submitted to the Secretary of State for Transport on 5 May 2006.

1 Qualification and relevant experience

Mott MacDonald, an established multi-disciplinary consultancy to the railway Industry has been appointed to take responsibility for the engineering aspects of this project. Chartered Railway civil engineer, Mr Richard Spoons has been engaged by Mott MacDonald to prepare the Proof of Evidence document in view of the impending Public Enquiry.

2 Purpose of the Proof of Evidence

The Proof of Evidence is aimed at providing an overview of the engineering aspects of the application which are referred to in the Statement of Matters summarised below:

- The impact of the scheme on rights of way, road and pedestrian traffic during the construction work and the planned temporary restrictions of use of foot-crossings.
- The suitability of the proposed diversions both permanent and temporary.
- The effect on train operating companies and other businesses.
- The effect of the scheme on local residents, businesses and the environment.
- The input of construction activities on pedestrian and road traffic
- The effects of the scheme on freight operating companies at Ipswich Yard
- The effects on the statutory undertakers
- The proposed Code of Construction Practice and engineering issues

The document also lends support to the mitigation of written objection made against the implementation of the scheme.

3 History of the Felixstowe Branch

3.1 The Rail Infrastructure Today and its Utilisation

The railway between Felixstowe and Ipswich, currently under Network Rail ownership, was completed in 1877. A new line was built in 1970 to provide access to Felixstowe Docks and further upgraded by the installation of power signalling in 1999.

The branch is single in the main and caters for diesel traction only. There are two junctions on the route at Trimley station where the line diverges to Felixstowe North docks and another at Maidstone Road bridge, the diverging branch is the short line to Felixstowe Town station.

The line is used for passenger services operated by train operating company 'one' and serves Ipswich, Felixstowe Town and three intermediate stations. The branch is also extensively used by freight trains destined for Felixstowe Docks and these are operated by EWS, Freightliner and GB Railfreight. At present the branch has a capacity for 25 outgoing and return freight trains per day.

4 Necessary Infrastructure Changes

4.1 Ipswich Yard

Ipswich Yard is to the Northeast of Ipswich Station and includes through reception lines and sidings. The present layout is adequate for the current volume and length of trains. Container trains need to use Ipswich Yard either to be prepared for their short journey to Felixstowe Docks, or, in the opposite direction, for their longer journey to their destination.

4.2 Effect on Ipswich Yard

The scheme is designed to increase the branch capacity to 38 longer trains a day. The trains will be 24 wagons long and therefore, three new 525m long through sidings are required. The main challenge was to find the optimum location for these new sidings. The proposed works will result in the closure of the little utilised Lower Yard, removal of the London end connection to existing sidings 1 to 6. Access to a number of single ended sidings to the east of the yard will be restored. The proposed works will also provide the opportunity to install a new drainage system in the yard.

4.3 Scheme Construction in Ipswich Yard

The construction works will cause little disruption to operations within the yard since it is little used at weekends when most of the work will take place. Since this type of work is planned well in advance, there is ample opportunity to set out alternative operating arrangements with the train operators in advance of any perceived disruption.

However, both EWS (OBJ/35) and Freightliner (OBJ/37) have raised objections in connection to the proposed changes in the Upper Yard.

4.4 Scheme Design on the Felixstowe Branch

An Operational Requirements Specification has been drafted and after considering a number of options, the chosen solution to achieve an increase in train capacity on the branch involves dualling the track along a section of 4 ½ miles between Potter's Hole and Trimley. This will allow two 24 wagon trains (510m long including Locomotive) to circulate on the branch simultaneously whilst maintaining an eight minute headway and

trains would be able to reach their destinations without intermediate stops. The dualling of the single line over the aforementioned section will result in the closure, amendment and re-construction of a number of level and Public Rights of Way crossings along the line.

4.5 Scheme Construction on the Felixstowe Branch

The proposed methodology for carrying out the work involves a continuous process with the installation of a safety protection barrier parallel to the existing single line. This will cause minimum disruption to current railway operations on the branch.

In view of the effect of the construction works on neighbouring parties, a Code of Construction Practice has been drafted which set out the measures necessary to ensure site safety, protection of the environment and defines the minimum acceptable standards for construction practice with respect to current legislation, statutory codes and standards. This document has been drafted in consultation with the relevant local authorities and regulatory bodies. The document also lists mitigation measures with respect to the objections raised by the various interested parties.

Once the Code of Construction Practice has been approved, the contractor will produce a Site Environmental Management Plan which will become an integral part of the construction contract. It is recommended an independent environmental auditor is appointed to monitor the effective implementation of this plan.

5 Changes to Level Crossings on the Felixstowe Branch

There are twelve public railway crossings on the branch varying from foot crossing to road crossings. All will be affected by the proposed works and this will result in temporary or permanent closures at some locations. During construction, several crossings may be affected simultaneously.

The effect of the construction work on the crossings is summarised in the table in appendix A.

6 Engineering review of objections to the scheme

Mott Mac Donald have carried out a full review of the objections to the scheme raised by the various parties and it is concluded that these objections will be mitigated to an acceptable level by the environmental management controls implemented by the contractor during the construction phase. These mitigating factors are fully described in the Construction Code of Practice.

The objections raised by EWS and Freightliner regarding the loss of sidings in the Upper Yard at Ipswich are considered to have a minimum effect since these assets are seldom utilised at present. The chosen methodology for the construction works is also designed to cause minimum disruption to the current level of train services operating along the branch.

The temporary restrictions of uses of public crossings is considered to cause minimum disruptions to pedestrian and road traffic during construction and the permanent closures are necessary to promote safe operations on the railway once the work is completed.

The benefits of being able to accommodate up to two 510m long trains in each direction on the upgraded branch will greatly outweigh the small amounts of disruption caused by the construction works.

7 Conclusions

The Felixstowe Docks Railway Company operational requirements have been clearly defined and allowed a design option to be developed which has been approved by The Felixstowe Docks Railway Company and Network Rail. Consultation has taken place with Her Majesty's Railway Inspectorate concerning temporary and permanent closure of public crossings and this process has not given rise to further objections.

Full consideration has been given to objections to the scheme and it is considered these have been mitigated in full or to a reasonable level of practicality.

Appendix A

Effect of the proposed construction work on the Felixstowe Branch Public Crossings

Location	Crossing Type	Proposed Work	Closure (temporary /permanent)	Notes
Westerfield	Road	Modification (CCTV)	-	
Levington Heath	Foot Crossing	Reconstruction	Temporary restrictions of use (15 weeks)	Footpath to be diverted during works
Levington Hall	Road crossing	Reconstruction	Temporary restrictions of use (21 weeks)	Traffic diverted by an alternative route when crossing is closed
Croft Public Footpath Crossing	Footpath	None	Permanent closure	Foot path diverted via Strattonhall drift
Morston Hall	Road	Reconstruction	Crossing to remain open with restricted use during works	
Thorpe Common	Footpath	Reconstruction	Temporary restrictions of use (15 weeks)	Alternative route is available using Thorpe lane road crossing
Thorpe Lane	Road	Reconstruction	Crossing to remain open with restricted use during works	
Grimston Lane	Footpath	None	Permanent closure	Footpath to be diverted via Grimston Lane and Thorpe Lane road crossing
Footpath 23	Footpath	Reconstruction	Temporary restrictions of use (15 weeks)	Alternative route via Grimston Lane and Thorpe Lane road crossing
Footpath 24	Footpath	Reconstruction	Temporary restrictions of use (15 weeks)	Alternative route via Thorpe Lane road crossing or Keepers Lane
Gun Lane	Footpath/Bridleway	None	Permanent closure	Bridleway to be diverted join footpath 24 crossing.
Keepers Lane	Public Bridleway	Reconstruction	Temporary restrictions of use (15 weeks)	Alternative route via Cordey's lane and High Road Trimley.
Trimley	Road	Minor reconstruction (re-alignment)	Temporary restrictions of use (24 to 78 hours)	Station footbridge available for pedestrians and limited access for emergency vehicles will be provided during the temporary restrictions of use