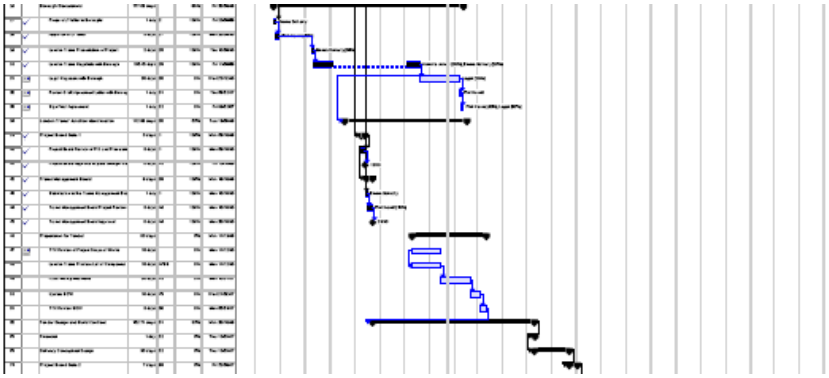
Track form trial

Development and implementation of an innovative design for tram crossings at heavily trafficked junctions

Holdfast level crossing system (for railways)

Selected test site for installation in Croydon, South London



Cut out of draft project plan

Research

Customer: TfL – London Trams

End: 2009

This research project is financed by the EU FP 6 project Urban Track and DfT/UK Tram resources. The project itself will be carried out by Balfour Beatty Rail Projects, TTK (as Urban Track leading partner) supports London Trams as reviser and for quality control purposes.

This project will investigate the practicality of providing an innovative conceptual design, which allows the crossing of roads with tramways, which can be installed during a weekend shut down. The project will investigate if a heavy rail level crossing system as used on ballasted main line track, can be adapted for use on in-street running tramways, which will result in reduced infrastructure costs and improved maintainability over traditional road crossings.

One of the most time consuming and costly aspects of the construction of tramways in the UK is works across major junctions, which are sometimes trunk roads. To minimise disruption to the residents in the vicinity, and the wider traffic network, construction at these junctions is normally undertaken only at night, but with standard construction techniques this can take up to several months.

Transport for London proposes to trial a faster method of track installation, investigating the use of level crossing technology developed for heavy rail using recycled materials. The aim is to enable the installation of the tracks and surrounding road surfacing within a weekend shutdown.

The technology proposed has positive environmental effects as it uses recycled waste rubber material from tyres. The material will also result in increased ease of maintenance for the rail replacement and surfacing and therefore reduced lifecycle costs.