

Shared Learning

COSTAIN

The Thameslink Programme

Issue Date: 24th March 2016 - For further info contact sharon.fink@networkrail.co.uk

Issue Number: TLP052 Title: Loose Flashing

Overview of Event:

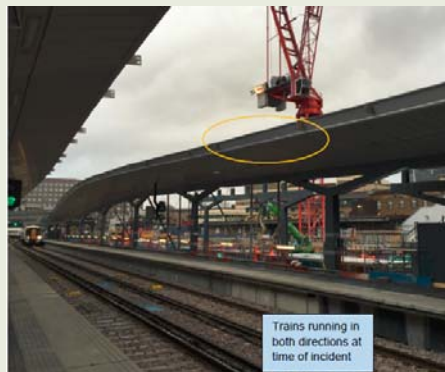
A section of the new canopy on platform 7 at London Bridge Station became partially detached in high winds. The nosing detail did not become fully detached from the canopy but was being moved significantly by the winds. It was assessed as presenting a risk to the safe operation of trains.

An emergency line block was taken to provide access to the track bed and platform to carry out remedial works. The line block lasted 70 minutes and resulted in disruption to train services (culminating in approximately 5000 minutes delay).

General Key Messages:

- Risks and controls required for permanent works being left in a temporary state should be understood and communicated to the work gangs
- Weather conditions and the impact on any works should be considered as part of the planning process
- Lessons learnt from previous events should be taken into account when planning works

Photo of Event :



Actions Taken As a Result of the Investigations:

- Design revised to include fixing detail (including temporary condition)
- WPP / TBS revised to include fixing detail / ITP revised
- Process to manage permanent works left in temporary condition being developed
- Governance of the Defect & Outstanding Work List (DOWL) system is being reviewed
- WPP / TBS / ITP being revised to make more prominent the requirements associated with the entering into service of works

Causes:

The immediate cause was that inadequate fixings on a section of the nosing to the platform canopy allowed the wind to get behind the nosing subsequently causing it to work free thus presenting a risk of failure and detachment and consequently presenting a risk to the operational railway.

Root and Underlying Causes

Design: The design included the fixing detail for the permanent condition but not the temporary condition. This resulted in insufficient information being made available for the authors of the WPP, TBS and ITP.

Procedure: The WPP and associated TBS did not include the fixing detail for the nosing in its temporary condition nor in its permanent condition. The requirement for lining and levelling to achieve Costain CRE and Network Rail approval of sections of nosing [and therefore the need to not install all of the fixings] was also missing. This lack of detail resulted in no direction for those installing the nosing and consequently the nosing was installed without an adequate number of fixings.

Procedure and maintenance management: The ITP did not include a condition relating to the fixing detail for the nosing in its temporary condition. The ITP was concerned only with the assurance of the nosing in its permanent condition as against the design specification. This lack of detail resulted in no direction for those checking the nosing as it was being installed i.e. there were no arrangements for the assurance of safety of the permanent works in the interim [temporary] condition.

Procedure: The incomplete canopy was not considered as 'temporary works' and therefore did not receive regular inspections. It is not known when the nosing began to work loose.

Organisation and compatible goals: delays in the programme made it too tight for the track & platforms to be Entered into Service (EIS) and completion of the works was restricted by works being carried out by other contractors on the track bed.

Procedure: The risk of high winds on the temporary installation was not identified in the WPP. Though the Project alerted the personnel to the forecast for high winds, the nosing was not considered because it had not been identified as 'vulnerable'.

Procedure: There was a failure to identify Platform 7 temporary condition as part of the snagging [DOWL] regime. Platforms 8 and 9 were incorrectly rated as an Amber on the DOWL RAG-rating (Red, Amber and Green). Had the platforms been [correctly] Red-rated then EIS could (procedurally) not have occurred until all identified defects were adequately dealt with i.e. trains would not have been permitted to operate.