

Shared Learning

The Thameslink Programme

Issue Date: 2nd June 2015 - For further info contact sharon.fink@networkrail.co.uk

Issue Number: TLP032 **Title:** London Bridge Failure of Lifting Sling (16th April 2015)

Overview of Event:

A lifting sling failed whilst a bespoke shutter was being transported to a storage area immediately after it had been lifted off a delivery lorry. The load was approximately 3 feet off the ground.

Underlying Causes:

- **Design:** The planned lift and install methodology involved lifting the shutters from the wagon using a 100 tonne crawler crane and lifting directly to the installation site. This was not followed.
- **Organisation (Planning):** A Lift Plan was available and valid for general lifts, including commonly used shutter sets but the Lift Plan was not adequate for the shutter offloading operation.
- **Organisation (Planning):** The shutter sides and soffit shutter arrived to site too early to enable preparatory works to be carried out before lift and install operation. This required an 'unanticipated' offload and storage operation.
- **Procedure:** The Crane Supervisor (CS) and Slinger did not use an approved method of packing between the webbing slings (straps) and the edges of the shutter. A cardboard material was used instead of a 'sling protector', which was not available at the lift location and would introduce a time burden.
- **Procedure:** A Point of Work Risk Assessment was not carried out which would have assessed the specifics of the lifting operation prior to slinging and would have identified the 'sharp' shutter edges
- **Procedure:** There was a Task Briefing but no Work Package Plan. However, the Task Brief was generic in nature and did not reflect the specific risks associated with the shutter lifting operation
- **Risk Review:** The operational Risk Review meeting to identify hazard and risk did not identify the need to offload the shutters remote from the 'lift and install' locations nor the use of alternative lifting equipment
- **Risk Review:** There is no evidence of minutes being produced from the Risk Review meeting which may have been used to inform the resultant WPP and Lifting Plan

Actions Taken As a Result of Investigation:

- The requirement to include the transportation, loading and lifting will be addressed with the manufacturer/supplier
- A WPP will be produced which will include a requirement for the Crane Supervisor to carry out a Point of Work Risk Assessment to assess the risks associated to each lifting operation
- The Task Brief was revised and will now include instruction on inspecting all accessory facing edges prior to test lifting
- Specific shutter lift plans will be introduced for each type of shutter
- Briefs were given to all lifting personnel on webbing slings and types of sling protectors that are available on site
- Minutes will be produced from all risk reviews meetings. A section on logistics which will include transportation and lifting operations will be included in the meeting as well as a site visit for all attendees where the Risk Review Rating is Medium or High.

General Key Messages:

- Any materials or equipment that requires to be offloaded or handled using mechanical lifting methods e.g. forklift, crane, Hiab etc should either have designed lifting points or there should be defined methods for lifting them e.g. slinging points, prescribed lifting tackle etc
- A safe method of work, including a lifting plan should be in place
- Any plant being used to lift materials should be adequate for undertaking the lift
- Any lifting accessories being used should be adequate to undertake the lift

Diagram/ Photo of event:

