



## Description of Event

*New overbridge planning and coordination delivered significant savings in WHS exposure, programme, worked hours and costs.*

### Population at Risk

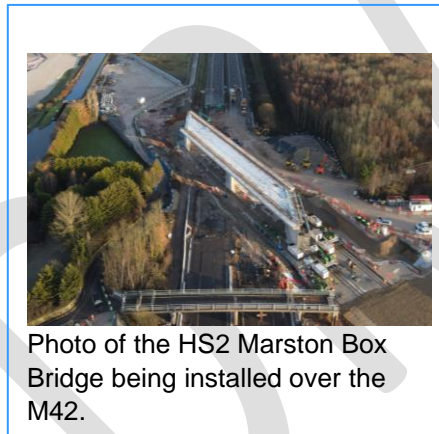
Construction Workers, Inspectors and Members of Public (MoP)

### Hazardous Activity and Residual Risk Description

- Traditional overbridge construction techniques normally include long duration contraflow, working at height, deep excavation, extensive plant-person interface, night working and working close to live traffic. These were avoided by use of innovative bridge slide methods.
- Residual hazards remained prior to re-opening the motorway, which required careful planning following the extended road closure including:
  - Potential for over running of road possession leading to extensive congestion of post-holiday period traffic, with increased chance for road accidents.
  - Increased project team stress due to in-closure work delays.

### Potential consequences of this event

- M42 closed for 10 day working window over the extended Christmas break.
- The reduced Christmas traffic flows were diverted onto other sections of SRN with minimal impact.
- Offline construction methods which delivered project savings significantly reduced roadworker and MoP. exposure **to all aspects of H&S hazards.**



### Potential Mitigation Measures

#### Design

- Early planning and communication protocols should be agreed from the outset between organisations.
- Undertake safety/cost benefit analysis to justify utilizing off-line techniques.
- Joint and open buildability risk reviews to inform cross party planning.
- Use of 4D digital simulation is recommended.



#### Construction

- Continued design/construction communications/reviews were essential in planning and delivery of the box slide up to and during the closure.
- Sufficient time should always be included within the closure programme to allow for structural and carriageway inspections to be completed.
- Development of joint agreed hand over protocols i.e.:
  - Checklist for inspections during closure and before road re-opening.
  - Provision of an Incident Reporting Flowchart

#### Maintenance / Operations

- Ensure close liaison between client road space booking teams, contractor's traffic management teams and planning teams to minimize re-opening delays.
- Consult client contingency plans to use tactical diversion routes.

### Further Guidance and Reading

- [RtB 26](#) – Safety by Design
- [HSW Case Study](#) – Reopening of Temporary Road Closures

[Safety Hub Alert Database](#)

Sub-category 2 Fall from height and filtering by text "lane closure" in the subject description has 3 alerts all with injury.



Please send ideas for Whole Life Design safety shares to [wellbeing@nationalhighways.co.uk](mailto:wellbeing@nationalhighways.co.uk)

LEAN	Material Reduction	Alternative Materials	Reduced Plant	Alternative Plant	Reduced Labour	Reduced Land	Reduced Transport	Improved end user benefits	Reduced Activity Duration	Reduced Defects	Reduced Reportable Accidents
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