

Safety Alert

Damage to Structural Element of Bridge

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The following pages of this safety alert were issued by Highways England's supply chain partner:

Costain

SAFETY LESSONS LEARNT

Damage to Structural Element of Bridge

What Happened

Excavation work for the installation of a new drainage run caused damage to an underground structural support strut. This strut is part of the Fawdon bridge structure which crosses the A1 taking the live Metro line from Central Newcastle to Newcastle Airport. The strut which was damaged was initially thought to be an 'obstruction' of concrete casing to the existing drainage. The engineers planning the works and the night shift delivery team had no knowledge of these underground struts (there are five in total) at the time of planning or executing the drainage works.



Figure 1: Damaged area with exposed rebar

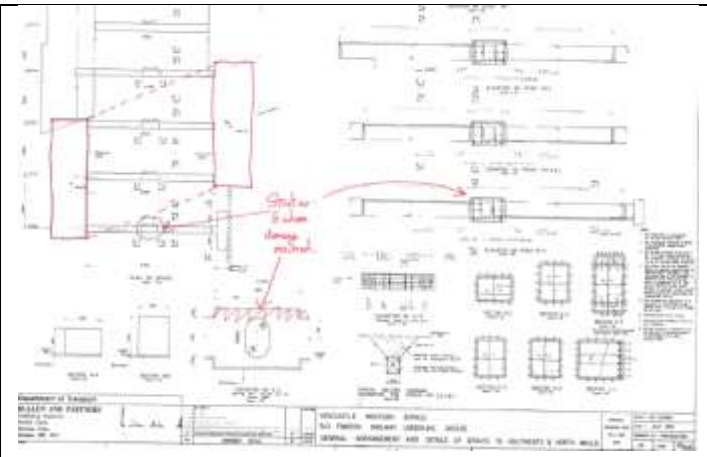


Figure 2: As built historical drawing showing struts

What did we learn?

To prevent a similar occurrence the following should be considered when carrying out excavation works of this nature:

- Ensure all historical drawings and as-built information is fully examined as part of the management of pre-construction information.
- If you are working as part of a joint venture, ensure workshops and regular communications take place between the design team and construction team.
- The message of 'stop and don't continue work if you are unsure about anything' must be strongly and regularly reinforced.
- Review and check your incident escalation communication procedures for clarity and understanding by all relevant parties.

Prompts for Contract Management Teams

- Ensure unusual / abnormal hazard and risk elements identified at due diligence stage are taken forward and transferred into the design risk management phase.



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