PDWG Task Group – Safety Shares

Summary on a page

Purpose of the Meeting - to review 3 incidents that had been drafted into a design safety share using the process already developed within other safety share meetings, with the aim to get them published onto the Supply Chain Hub website

Attendees

- Martin Partington (Jacobs) Chair
- Doug Potter (Arcadis)
- Sophie Gwynne (Arcadis)

Attendees

- Jim Gallagher (National Highways)
- Sam Allin (Jacobs)
- Rob Butcher (Jacobs)

Last meeting

- Finalised 3 safety shares (following 3 pages)
- Identified next 3 for the next meeting
- November's meeting to review list of shares in the pipeline

Outstanding issues

- Communication of published shares
 - Review access from the websites
 - How to find them
 - Communicate to wider audiences

Outcomes and Next Steps

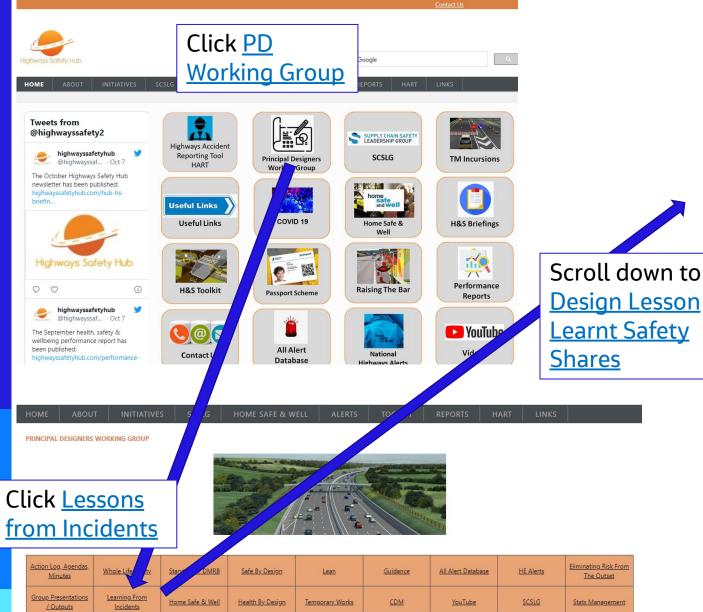
- Next meeting on 25th Oct to review another 3 shares
- Then following meeting on 30th Nov to prioritise next steps

Apologies

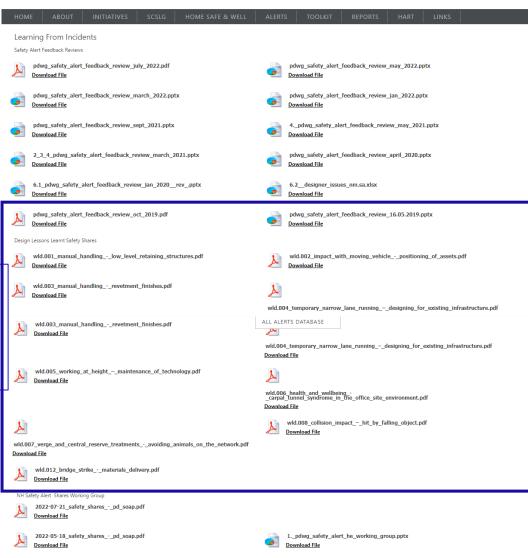
Ref	Share Title	
Number		Status
WLD.001	Manual Handling - Low Level Retaining Structures	Published
WLD.002	Impact with Moving Vehicle - Positioning of Assets	Published
WLD.003	Manual Handling - Revetment Finishes	Published
WLD.004	Temporary Narrow Lane Running – Designing for Existing Infrastructure	Published
WLD.005	Working at Height - Maintenance of Technology	Published
WLD.006	Health and Wellbeing - Carpal Tunnel Syndrome in the Office/Site Environment	Published
WLD.007	Verge and Central Reserve Treatments – Avoiding Animals on the Network	Published
WLD.008	Collision/Impact – Hit by Falling Object	Published
WLD.009	Planning and Preparation for a Visit to Site	Finalised
WLD.010	Confined Space, Slips, Trips and Falls and Access Into Chambers	Finalised
WLD.011	Working at Height - When Is a Fence Not a Fence	Drafted
WLD.012	Bridge Strike - Materials Delivery	Published
WLD.013	Strategic Road Network (SRN) Interaction - Live Carriageway Working	Finalised
WLD.014	Stress Management (Wellbeing Share)	Drafted
WLD.015	CDM Designer Duty – Failure to Provide Adequate Access	identified
WLD.016	Retaining Wall Component - Other	identified

1 ©Jacobs 2021

Published Safety Shares - Location







Lessons Le

gantry_access_recap2.pdf

Download File

a63_tm_-_ped_issues.pdf <u>Download File</u>

pdwg_cid_accident_investigations_jan_2021.pptx

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Description of Event

An Engineer went to site with no safety documentation in place. Upon arrival, they discovered the shift had been stood down that day.

Population at Risk

Visitors to site, project team including designers and surveyors.

Hazardous Activity and Residual Risk Description

- Inadequate information, instruction, and training provided for site visitors.
- Inadequate supervision of site visitors.
- Breakdown in cooperation between site management and project team.
- Failure of site management team to report to project team change in circumstances on site.
- Worker visiting site unaware of site hazards and associated controls measures with an assessed residual risk of an almost certain likelihood of major harm.

Potential consequences of this event

- A site visitor could have been exposed to multiple construction site hazards resulting in reportable injuries.
- Prosecution of client or inadequate arrangements for managing projects.
- Prosecution of principal contractor for lack of suitable site induction and failure to undertake general duties



LEAN

Safety Hub Alert Database

No issues on current database as of August 2022.

Potential Mitigation Measures

Client

Confirm site management arrangements for visits to site and site inductions are suitable.



Design

- Conduct site visits virtually where possible.
- Provide information on procedure for visits to site.
- Provide instruction and training on procedure for visits to site.
- Prepare site induction and ensure all project team complete site induction.

Construction

- Include site visit protocols within Construction Phase Plan.
- Inform project management team when site is open and site is closed.
- Prevent access to construction site by unauthorised persons.
- Visits to site by project team, including designers, must be planned in advance with written acceptance from site management team.

Maintenance / Operations

- Raise safety observations.
- Site visitors are to check it is appropriate to visit prior to travelling.
- Travel safety action plans or similar to be in place at all stages of operations.

Further Guidance and Reading

- RtB 23 Site Inductions
- RtB 26 Safety by Design
- Kate's Story A Safety Video



SUBSTITUTE

CHANGE/REPLACE



Description of Event

Workers inside inspection chamber that has no safe means of access and no measure to prevent unauthorised entry into confined chamber.

Population at Risk

Construction Workers

Hazardous Activity and Residual Risk Description

- Access to chamber is via an unstable steep slope of made ground with an assessed risk of likely of serious harm.
- Unauthorised entry into chamber designated as a confined space with an assessed risk of major harm.
- Working adjacent to loose material without adequate means of retention with an assessed risk of almost certain of minor harm.

Potential consequences of this event

- Slips, trips, falls resulting in reportable injury.
- Loss of consciousness resulting in death.
- Struck by moving material resulting in minor impact and crushing injuries.

Safety Hub Alert Database

 Filtering by the text "confined space" in subject description has 1 alert with injury.



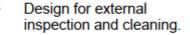
Photo of uncontained mounded fill beside a manhole which is deemed a confined space.

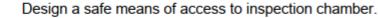


Photo of site worker in confined space without the correct precautions.

Potential Mitigation Measures

Design





- Design of inspection chamber's top biscuit to include preinstalled access cover.
- Provide a digital geospatial means to control access to chamber.
- Invert levels to be no greater than 1.2m below finished ground levels.

Construction

- Put in place suitable control to prevent unauthorised access to inspection chamber.
- Ensure safe means of access and barriers to work site is provided.
- Ensure site hazards are eliminated, including loose material, before starting work.
- Adopt digital technologies to inform workers of existing site hazards.
- Provide warning signage around existing site hazards.

Maintenance / Operations

- Consider external inspections and cleaning techniques.
- Maintenance records to include safe means of access.
- Identify all residual hazards associated and include within RAMS.

Further Guidance and Reading

- RtB 14 Slip; trip; fall
- RtB 26 Safety by Design



WLD.013

Description of Event

Vehicle operating within barrier safety zone and soft verge edge due to insufficient working width.

Population at Risk

Construction Workers, Maintenance Workers and Road Users

Hazardous Activity and Residual Risk Description

- Vehicle driving close to barrier within working width.
- Vehicle operations with nearside wheels on soft ground (verge) has an assessed residual risk of a likely likelihood of major harm.
- Vehicle driving at top of slope with no edge protection.

Potential consequences of this event

- Vehicle is at risk of overturning which could result in plant operative and or ground workers in the vicinity being injured.
- VRS will not perform as expected in the event of a collision.
- There is high potential for serious injury due to plant operating within the barrier deflection Safety Zone.
- The residual risks require the working width requirements to be adhered to

Safety Hub Alert Database

- Category vehicles with subcategory 2 overturning has 14 alerts including 1 with injury and 1 with a fatality.
- Sub-category 1 MOP vehicle. Lorry Loader cranes and x -Misc with sub-category 2 collision, competence and uncontrolled plant movements with a text filter for alerts containing "VRS" has 3 alerts.

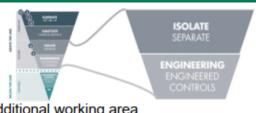


Photo of vehicle within 600mm Safety Zone of VRS barrier.

Potential Mitigation Measures

Design

Confirm that there is sufficient working width available. If not, potential to request land for temporary works to facilitate additional working area.



- Allowance for barrier Safety Zones and edge protection must be considered at all times.
- Working at night could be considered, to allow increase in extents of lane closures, increasing available working width. Direct and indirect network impacts on safety will need to be factored in, in respect to setting up of the TTM, potential traffic congestion and side road impact.
- BIM and other digital solutions to be used within the design process to check how the size of plant will operate safely within the area.

Construction

- Potential provision of edge protection at crest of embankment to ward haulage drivers away from vulnerable edge.
- Identify appropriate working width constraints to the available carriageway and provide it.
- Use alternative plant, e.g., tracked dumpers.

Maintenance / Operations

- Similar considerations to the above should be considered for maintenance works e.g., widening or drainage operations.
- Update existing maintenance traffic management plans.

Further Guidance and Reading

- RtB 1 Plant and Equipment
- RtB 2 Plant Person Interface

Alternative

Plant



Please send ideas for Whole Life Design safety shares to wellbeing@nationalhighways.co.uk

LEAN

Alternative Materials

mproved end user benefits

Reduced Reportable Accidents