



Description of Event

A designer has specified a block paving finish for a bridge revetment increasing repetitive strain or risk of slips

Population at Risk

Maintenance Contractor Workers and Inspectors

Hazardous Activity and Residual Risk Description

- Maintaining and inspecting a bridge revetment may expose workers to tripping on uneven ground hazards, slipping and falling on slopes with an assessed residual risk of an almost certain likelihood of minor harm and a may happen likelihood of moderate harm being incurred.



Photo of a bridge revetment without surface stabilization treatment

Potential consequences of this event

- This residual risk may require a safe working at height solution to be designed and implemented, such as a rope access system.
- A finish that cannot be easily and quickly maintained or one with a short design life increases the number of man-hours to which workers are exposed to the hazards and risks.
- A soft landscaped revetment exposes maintenance and inspection workers to a higher number of man-hours compared with a hard landscaping finish.

Safety Hub [Alert Database](#)

- Sub-category 2 Slips trips & falls (same level) for Housekeeping has 13 alerts.

Potential Mitigation Measures



Design

- Design bridges without sloping revetments.
- Specify revetment with a slip resistant hard finish.
- Evaluate block paving with sprayed concrete solutions.

Construction

- Submit Request for Clarification.
- Raise safety observations.

Maintenance / Operations

- Submit Works Request to provide a hard landscaped finish and raise safety observation.
- Design suitable engineering controls when working on sloping revetments.

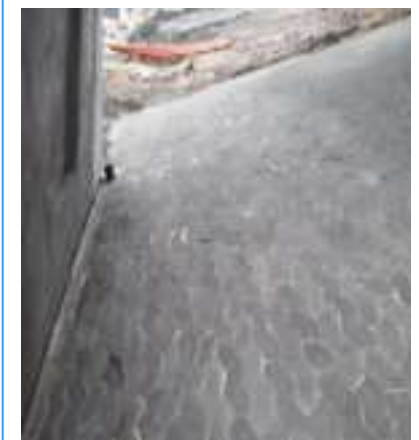


Photo of a bridge revetment with block paving surface treatment

Further Guidance and Reading

- [BD 97/12](#) – The Assessment of scour and other Hydraulic Actions at Highways Structures.
- [CD 351](#) The design and appearance of highway structures
- [LD 117](#) Landscape design.
- [DMRB GD 304](#) – Designing health and safety into maintenance
- [CIRIA C686](#) Safe access for maintenance and repair. Guidance for designers.



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