BEST PRACTICE

LOCATION: **ACTIVITY:** SUB ACTIVITY: **BEST PRACTICE No: COUNTRY OF ORIGIN:** Contracting - On-highway Contracting No Sub Activity Available

BP2073

COMPANY: COMPANY LOCATION: COMPANY TEL:

ARTICLE YEAR

2019 **FM Conway** Contracting 0000

TITLE



Reversing differently, innovative critical safety thinking - WINNER

ARTICLE

DESCRIPTION

In 2018, FM Conway's analysis of 53,000 near miss reports identified that the control of sweeper reversing manoeuvres was an issue.

One high potential near miss involved a sweeper reversing into a parked HGV tipper lorry, narrowly missing an operative standing at the rear of the vehicle. The incident, which was captured on a video, showed how closely the operative was to a potentially fatal injury.

Several control measures were already in place on Conway's sweepers such as a white reversing beeper, reversing cameras, recording cameras, 5 and 2 blue lights (exclusion zones lights), proximity radar and reversing vehicle assistance. However, despite these control measures, the near miss analysis demonstrated there were still serious incidents occurring.

Conway uses sweepers across its core highways services, but especially for its surfacing division. Although sweepers typically move at slow speeds in this environment, the nature of surfacing works often means that large numbers of construction personnel are required to operate in close proximity to machinery and on-site obstacles, raising the risk of accidents. A sweeper will typically spend 50% of its time in reverse gear whilst on surfacing works.

Minimising this hazard became a priority for FM Conway and a range of new initiatives were introduced including;

Auto-stop technology

The business commissioned Safety Systems Ltd (ISS) to develop a bespoke auto-stop reverse radar system to work in conjunction with the CAM system on the vehicles. Using sensor technology, the system automatically applies the vehicle's brakes when an object comes within four metres of the vehicle, coming to a complete and controlled stop. This innovative system complements the existing suite of safety measures already in place.

Importantly, the system is designed to support drivers as a critical risk control measure, and not to replace focus on supervision, training, and positional safety. The new system to track how often the technology is deployed, meaning that we can identify the need for further training to ensure that safe practices become fully embedded across our teams.

Stand down day & sweeper permit

A health and safety stand down day was held for its surfacing division where the high potential near miss film was shown and discussed. Emphasis was placed on the importance of ensuring that all the risk controls were implemented, to raise awareness of the hazards and to challenge their risk perceptions relating to sweepers. A new sweeper permit was introduced at the stand down day.

The sweeper permit is to be completed by sweeper drivers and supervisors before works commence. The permit was introduced as an additional safety control measure.

On-site measures

A direct radio contact between the sweeper driver and reversing vehicle assistant was introduced as an additional safety measure. An exclusion zone marked with yellow cones and flashing beacons was also introduced on site to identify the area that is required to be swept. Once installed, the sweeper can only sweep within this area. No other operatives are allowed within the exclusion zone, but if someone does enter the driver must stop immediately or the reversing assistant is to say 'stop, stop, stop' over the radio.

To ensure the implementation of these new measures the business increased the number of safety site visits. Checks were made to ensure the updated RAMS and permit to sweep with additional controls were all in place across all contracts.

BENEFITS

- Raised awareness of hazards associated with sweepers/ reversing
- Complimentary safety measures in place both technical and behavioural Technology has been applied to all Conway's sweepers
- No vehicle high potential reversing incidents on sweepers for 9 months
- A safer work environment for all
- Information is being shared with industry

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