

FEDERATION OF PILING SPECIALISTS SAFETY ALERT

The below information has been issued on behalf of the FPS to make others aware of the potential risks and possible precautions to take in order to avoid these.

Type of Incident:

HiPo – near miss



Nature of Incident/Injury:

Unstable Piling Rig

Details of Incident:

On the day of the incident the site team had just bored a 350mm x 10.5m pile when the concrete pump broke down. Needing to clear the concrete lines the team pulled off the pile and were in the process of tracking back away from the pile when the front of the rig tracks started to sink. Attempts to reverse and then track forward only made the rig sink further. The rig operator lowered the mast foot, and the attendant excavator was used on the rear of the rig to provide additional stability to the machine. Management attended site and the rig was safely recovered to a stable position, where upon an investigation commenced. The Investigation determined that a soft spot was present in 'firm clay' subgrade that had gone unnoticed /un-remediated.

The design assumptions and the design allowed for two assumed subgrade strength values. The PC adopted the stronger value and therefore a reduced platform thickness, but still within the design. A 6F2 fill was to be used but the as used platform material was questionable and likely not to have been as specified. No grading certs were provided. Plate load testing had been carried out and did not show any cause for concern.

The platform installation methodology could not be confirmed.

Root cause (if known):

Failure to manage the platform installation in accordance with the design

- Soft spot not identified and remediated
- Suspect SF2 material used

Action Taken:

Platform was remediated with a lean mix concrete and increased platform thickness, and additional plate load tests were completed.

Lessons Learnt:

Internal review underway to determine how best to carry out due diligence in relation to the working platform suitability.