



## Track Pan installation at Perth train depot

### The Challenge

**When a new carriage wash facility was being constructed and installed by Cairn Cross Civil Engineering Limited for ScotRail and Network Rail in Perth, a requirement was to provide a preventative measure for the waste water and other contaminants entering the ballast, without disturbing the track. Any contaminants to enter the ballast would incur penalties and charges from environmental agencies, as well as damage to the environment. In addition for many years the old train wash plant contributed to a wet track bed on the adjacent mainline.**



### The Solution

The Track Pan system is a modular collector system for fluids that fits onto existing track without the requirement to lift or modify the track. A single Track Pan module is molded from durable GRP with adjustable pedestals to securely supporting the pan.

For the Perth installation the following Track Pan elements were installed.

- Modifications to the side Track Pan to collect waste around the constructed concrete plinths.
- The interfaces between the Track Pan and its surroundings were sealed to ensure containments did not enter the ballast.
- Adjustable pedestals securely supporting the Track Pan allowed for height variations of the track. This removed any deviation in the sleeper height ensuring an even level.
- Grating walkways were installed on top of the Track Pans to enable operatives to walk over the track.
- The level of the grating was maintained level with the top of the rail face to avoid any trip hazards.
- The Track Pan allows for correct disposal of contaminants to the appropriate drainage system to be safely discarded.
- The installation of Track Pan has given full assurance of no waste water finding its way onto the mainline track bed.



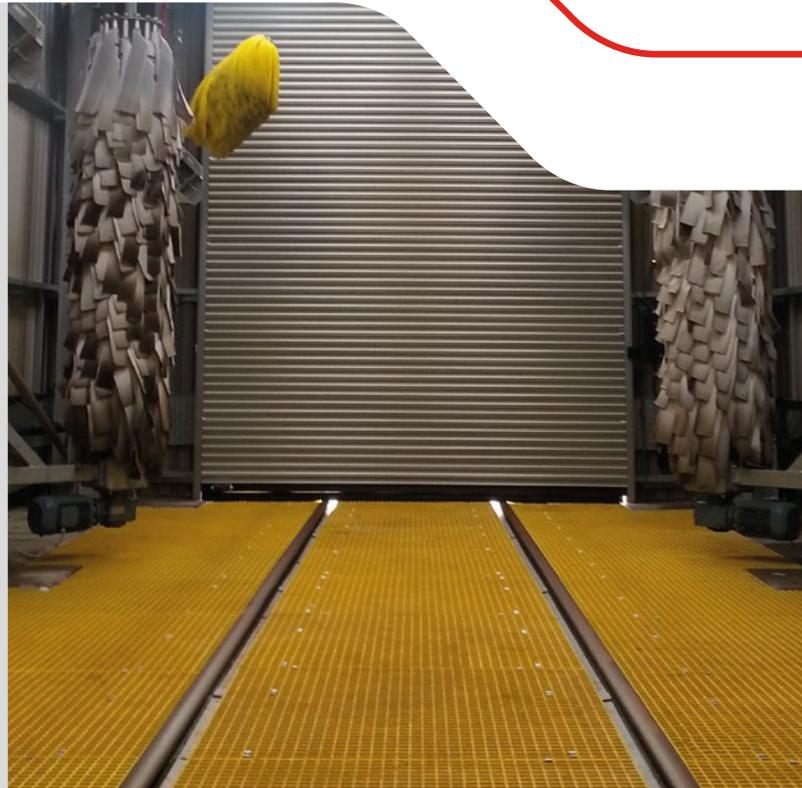
## The Result

Track Pans caught and discarded 99.9% of the liquid waste contaminants to the drainage system.

Using pressure activate seals along the rail and pan interface as opposed to adhesives, allows for checking of the rail clips and sleepers with no disruption to the system.

The ability of the Track Pan to be retrofitted with a relatively fast and simple installation meant the Track Pan could be installed to suit the project program without significantly interfering with the operation of the depot, and ensured the siding road could remain in use at night time.

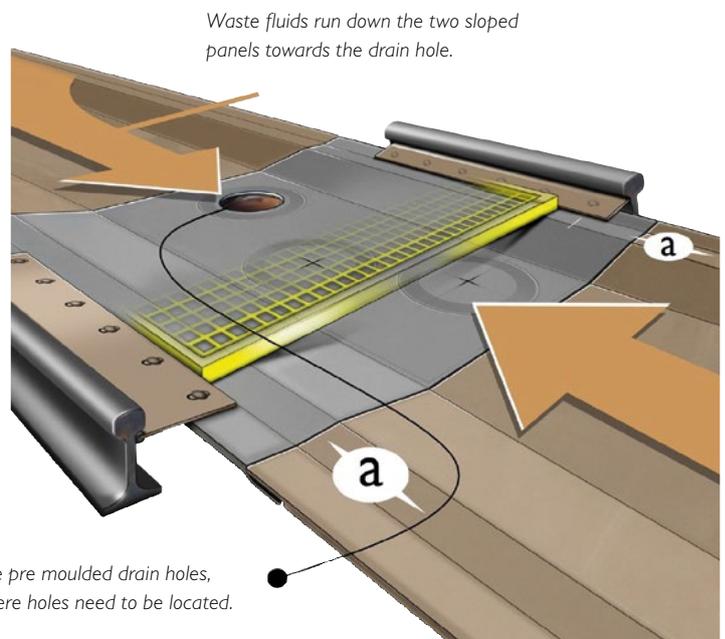
The innovative and environmentally friendly Track Pan system substantially reduced the cost of building an alternative concrete waste system.



## Track Pan's Performance

The installation at Perth is still functioning very well several years after the installation in recovering the waste water and its disposal utilising the Track Pan system in the train wash area. With regular maintenance and inspections the product is performing as specified and with a design life of 20 years, this level of operation would be expected.

The bespoke design of the side Track Pans at Perth provided the client the opportunity to see how this system can be adapted to fit any configuration around the track.



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