## Case Study

## **Concrete Track Slab Extension**





Haigh Rail has completed an intensive railway design and build contract to extend the Road 5 reinforced concrete track slab to allow the train operator sufficient space to install temporary buildings for ongoing rolling stock repair and maintenance works.

The slab extension covered an area of 40m x 12m (480m2) and involved the removal and reinstatement of track and components, to facilitate the excavation and formation of the new concrete pad. The new slab was also required to tie into the existing plinth, which was completed by drilling and fixing steel dowels, which were secured into existing slab structure with a two-pack epoxy resin. Like any extensive concrete extension, the slab was poured in sections to suit expansion requirements.

Haigh Rail acted as the Principal Contractor throughout the works and appointed a civils designer from its supply chain. Integrating Design and Construction was fundamental to this project with track and civils elements working in harmony through Haigh Rail's multi-disciplinary engineering and delivery team. This single, combined approach enabled the full D&B process to be managed and all build challenges to be closed out through close co-operation from the design team into site constructability.

The project also included rebuilding drainage inspection chambers and installing electric ducting for cable installations and in compliance with Haigh Rail's sustainable policy, a full waste management hierarchy was instigated, with all items separated and recycled via licensed materials handlers.

Full materials testing was completed with as built documentation supplied as part of the handover pack.

Haigh Rail's meticulous approach to surveying, railway engineering and on-site delivery provided complete project surety, with the track being installed first and then the concrete placed thereafter.

Despite challenging winter conditions, the works were completed on time, to budget – to the delight of the customer, who was 100% satisfied with the end result.