

**READYPOWER****TERRAWISE**

READYPOWER TERRAWISE WORK TO STABILISE MANCHESTER'S TRAM LINE

AT A GLANCE

Over a 9-day blockade, Readypower Terrawise installed 500 metres of sheet pile wall to stop soil movement pushing the tram line out of alignment.

- 9-day blockade
- Round-the-clock operations
- 20 people per shift
- 19 shifts worked
- 500 metres sheet pile wall installed

"Readypower Terrawise responded proactively to a challenging programme, providing solutions whilst not compromising on safety. They also bolstered their capability to ensure we delivered on time. I look forward to working together again in the future."

Chris Chung
Senior PM, Story

THE CHALLENGE

Land adjacent to the tram line in Manchester was being used as a landfill site, with tens of thousands of tonnes of soil having been deposited. The weight of the soil was pushing the tram lines out, meaning that the trams couldn't run at full speed. Transport for Greater Manchester was unable to find the owner of the land and so they approached us to support them with the project.

The design required the sheet piles to be driven into the ground to act as retention so that they stopped the tram lines moving.

To minimise the disruption to customers using the tram, we were booked to work during a 9-day blockade.



OUR APPROACH

Our designers reviewed the Ground Investigation (GI) report prior to mobilisation, where it became apparent that the ground softness was variable along the route. The decision was made to install different sized piles in different areas according to ground conditions.

We worked 24 hours over the 9-day blockade, with day teams and night teams. During the shifts we had teams setting off in opposite directions to get the most work completed during a shift.

On this project we used the specialist Giken Silent Piling Rig. This worked really well in keeping our noise output down and reducing the vibrations from installation.



THE DELIVERY

Over the blockade we installed 500 metres of sheet pile wall using piles of 12 and 16 metres, varying to suit the actual ground conditions.

A portion of each pile sat above ground and had to be cut off, with all the surplus steel removed from site and recycled.

At any one shift we had around 20 people working to be as efficient as possible. To ensure we met the delivery deadline, we called in reinforcements from our sister company, Readypower Rail Services (RRSL). Within 2 hours of speaking to RRSL, their new Colmar excavator and Movax piling attachment were on the road, on the way to site.

Mindful of noise pollution, we predominantly used this equipment during the day shifts.

The delivery was a fully collaborative effort with Readypower Terrawise leading the installation, being supported by equipment and operators from Readypower Rail Services and Force One, part of the Readypower Group.

THE RESULTS

Following our installations the tram lines were stabilised and full speed was restored. The blockade was handed back on time, with no disruption beyond the planned window. Our client was very pleased with the outcome, and they can now continue their improvement works knowing they're working on solid foundations.