

LUTON STATION

 Luton

As part of the ongoing Luton Station upgrade works, Van Elle's were engaged by Story Contracting to deliver a package of temporary works and foundation solutions to support the station's accessibility improvements.

The works formed part of the Government's 'Access for All' programme, which includes the installation of a new footbridge, three lifts and a stairway to improve passenger access across the station.

PROJECT BACKGROUND

- Appointed by Story Contracting.
- Van Elle Rail team completed the installation of 120 No. sheet piles, ranging from 3.5m to 5.5m in length, across multiple platforms to enable the construction of three lift shafts and a new stairway.
- Following this, Van Elle's Specialist Piling team completed the associated foundation package, comprising 46 No. 273mm and 6 No. 323mm steel cased driven piles (SCDP).

CHALLENGE

Working within a live station environment presented several logistical and operational challenges, with multiple contractors operating across the site during limited weekend possessions. Maintaining safe access, coordinating activities and managing plant movements were critical to ensuring the works were delivered without disruption.

The team also had to navigate a number of known buried services within the platforms, requiring detailed planning and precise installation methods to avoid damage and maintain programme progress.

Due to the restricted working area and limited possession availability, the original piling design required revision to accommodate smaller specialist equipment while maintaining productivity and safety standards.

Additional challenges included existing concrete obstructions, restricted access between platforms and the requirement for multiple plant and material movements via RRVs across a temporary poly bridge.

SOLUTIONS

Van Elle's design team developed an optimised solution using smaller Super Kitten and D1000 drop hammer rigs, enabling works to be completed within restricted platform areas and limited possession windows.

Sheet pile installation was delivered over four shifts using three RRV-mounted piling attachments, with robust exclusion zones maintained throughout.

The foundation package was completed using steel cased driven piles, with the team overcoming access constraints, complex logistics and multiple platform operations to deliver the works ahead of programme.

AT A GLANCE

Sector: Rail

Solutions & Techniques: Sheet Piling and Steel Cased Driven Piling

Client: Story Contracting

Van Elle Division: Specialist Piling

EQUIPMENT

- Super Kitten
- D1000 Drop Hammer Rig
- RRV

