

Railway Foundation Driver Access Platform

CLIENT

South Western Railway

CONTRACTOR

Trackwork

PARTNERS

Dura

Requirement

South Western Railway required a new driver access platform at Farnham Rail Depot, designed to allow train drivers to safely enter and exit the train before it entered the train wash area. The driver access platform was supplied by Dura, with Trackwork responsible for the installation.

A suitable foundation solution was required to support the platform within the rail depot environment, where programme efficiency, limited access and reduced disruption were key considerations.

Traditional concrete foundations were initially a concern due to the time required on site, the need for excavation, and the associated muck away. To reduce these challenges, Dura recommended Anchor Systems as an alternative foundation provider. Anchor Systems proposed the use of Anchor Screw foundations, offering a quicker, lower-disruption railway foundation solution that removed the need for poured concrete and helped minimise excavation requirements.

Testing

Ground information for the Farnham site indicated that the upper ground conditions were likely to comprise approximately 2 metres of sand and gravel, overlying sandstone from the Folkestone Formation. This meant that installation beyond 2 metres was expected to be difficult, particularly where the ground transitioned into harder material. The design loads for the driver access platform were relatively low, with compression loads under 10kN.

The installation approach focused on ensuring the Anchor Screw foundations reached the required depth, in line with the project requirements and the site constraints. During installation, the ground proved more challenging than anticipated. The initial installation was attempted using a 400H Torque Head, but due to the tough ground conditions, a larger 700H Torque Head was required to complete the works.

Solution

Anchor Systems supplied 16 Anchor Screw foundations to support the new Dura driver access platform at Farnham Rail Depot. The Anchor Screw system provided a practical alternative to traditional concrete foundations, helping to reduce the need for excavation, spoil removal and extended time on site. This made it well suited to the rail depot environment, where efficient installation and reduced disruption were important.

The piles and pile adaptors were installed by Trackwork over two shifts. Although the installation could likely have been completed in one shift under more typical ground conditions, the requirement to change to a larger torque head extended the programme slightly.

Despite the challenging ground, the Anchor Screw foundations were successfully installed to the required depth, providing a reliable railway foundation system for the driver access platform. By using Anchor Screw foundations, the project avoided the additional excavation and muck away associated with concrete, while delivering a clean and efficient foundation solution for a rail access structure.

