

White Hart Junction

Client: Octavius Infrastructure

Value: Circa £1,050,000

Duration: 20 weeks

Project Detail

Issue:

Suttle Projects was appointed to deliver a complex piling and retaining wall package as part of the construction of new railway overbridge abutments. The scope of works included:

- The installation of 28 rotary bored piles using our Soilmec R210 piling rig
- A kingpost wall comprising 32 kingposts installed with our Volvo EC300 excavator and our Movax SG65 side-grip vibratory piling hammer
- A sheet pile wall installed using our excavator fitted with a Movax SG75 attachment to facilitate the construction of the piling platform and access road.

The works were carried out adjacent to a live railway, presenting significant logistical and safety challenges. Detailed ALO planning, robust methodologies and strict controls were required to ensure a safe system of work while operating close to the railway envelope. During the kingpost installation, unexpectedly stiff clay ground conditions were encountered, creating difficult driving conditions and posing a potential risk to programme delivery.

Solution:

Drawing on our specialist expertise and extensive plant fleet of piling, we developed a flexible and efficient approach to overcome the challenges encountered on site. Comprehensive planning and collaboration with stakeholders ensured that all works could be undertaken safely within the constraints of the railway environment, maintaining the highest standards of safety and operational control throughout the project.

When stiff clay was encountered during the installation of the kingposts, the team responded quickly by reviewing the methodology and mobilising an impact hammer to supplement the vibratory installation process. This proactive approach enabled us to install the kingposts to the required design levels without delay.

The versatility of our plant fleet also provided additional value throughout the programme. As site conditions evolved, the team was able to adapt both the permanent and temporary works solutions, including the installation of additional sheet piling to facilitate the access road and

piling platform. This flexibility ensured progress could continue without disruption while meeting the project's changing requirements.

Outcome:

The project was delivered safely, efficiently and in accordance with programme requirements, providing the critical foundations and retaining structures needed for the railway overbridge construction.

Through careful planning and disciplined execution, we successfully maintained safe operations adjacent to a live railway, demonstrating our reliability in delivering complex infrastructure works in challenging environments. Our team's ability to rapidly adapt to unforeseen ground conditions showcased a practical and creative approach to problem-solving, while the availability of a diverse specialist fleet enabled productive delivery and minimised programme risk.

By responding quickly to changing site conditions and reducing the potential for delays or rework, we delivered a solution that not only met the project's technical requirements but also supported efficient use of our resources and equipment. The result was a successful piling and retaining wall package that enabled the wider railway overbridge programme to progress on schedule.

Photographs:



