

Efficient and Easy Elevated Troughing – A Case Study

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Working on projects in the rail industry often brings it challenges with congested infrastructure, old and new technologies merging or ground conditions proving difficult. Projects often need special attention to ensure perfect delivery. When railway engineering contractors Haigh Rail Ltd had one such project at Greenbank Station, Arcosystem was the perfect choice.

Haigh Rail was tasked with the installation of new elevated troughing for the holding of a 650v power cable. The design of this particular trough route was more unusual than most. Ground Investigation revealed conditions were very poor and that the usual 1.9 metre posts with 600mm foundations were simply not going to cut it. Instead, 4 metre posts were required to give the route the anchor it needed. This required bespoke posts and bracketry to support the Arcosystem which had been specified for the project.

Arcosystem was chosen due to the ability to create bespoke products with ease and at speed. The bespoke bracketry required for Greenbank Station took just 5 weeks from concept through to the delivery.

Chris Haigh, Managing Director of Haigh Rail said of Arcosystem: “It is simple to install, we had no site issues and everything went smoothly. We were achieving 24 posts and 15 lengths (90 metres) of route in 4

hours which is amazing considering we were pushing in 4 metre posts, utilising an RRV and we found lots of buried cables in the way. This was by no means a perfect area.

"The product looks great and our client is happy. We did need additional materials mid-way through the scheme which was sorted efficiently by Scott Parnell, the UK distributor of the product. Scott Parnell provided a great service overall, very efficient staff and supply. I would highly recommend Arcosystem as it is simple to install."



Further testament to the system was when rail contractors Greenway Rail and Power were contracted to deliver a project at a substation in South London, where again Arcosystem was the perfect solution.

The HV feeder cables needed raising from ground based troughing to elevated. The main reason for this upgrade was to protect the cables from excess surface water caused by drainage issues arising from the woodland which lied in close proximity to the route. Elevating cables for this reason is becoming more commonplace now that we are susceptible to more surface water.

Arcosystem was the perfect choice for this project; it is the only Network Rail approved elevated GRP cable trough suitable for High Voltage cables which can support itself at 6 metre post centres. Due to the route needing to span over water ways, and over vegetation, a route which installs with less post centres was the obvious choice. This, coupled with the lightweight nature of the product and the reduction in post centres meant the install was quick and easy.

David O'Connor MD of Greenway confirms: "The Arcosystem works very well on long runs and helped us ensure the containment of cables over a waterway running right through the middle of the site, the install went very well and in good time. Within a few weeks the cables could be re-jointed and energised ensuring full capacity of the railway thus preventing further delays to our passengers. Greenway would happily use Scott Parnell and Arcosystem going forward, and we certainly look forward to dealing with the team on the next project."

Scott Parnell holds the rail industry accreditation RISQS (Railway Industry Supplier Qualification Scheme), which formally recognises the company as capable providers of products and services. To get in touch with one of the rail experts, contact the team on 0208 805 5797.

