



Case Study – Tebay Points Heating



This project is concerned with the design and installation points heating equipment where access for maintenance would be across a viaduct with Limited Clearance.

Jones-Jack were approached for a design which would enable the point heaters to be routinely tested and maintained without the need for Red zone working which, at this particular site, necessitated costly possessions and/or blockade.

The project involved revisiting the standard heater strip plug and socket arrangement located in the four foot and supplying the heater strips with longer tails. These were then connected to local pedestal junction boxes located in the Cess. Multicore cables were then run from the junction boxes to the 110V transformers which were located in Green Zones. This enabled testing of individual heating elements from the transformer secondaries. The cable design encompassed all the restrictions and limitations on voltage drop on both the 230 and 110V circuits and maintained 110V at the heater strips by using appropriate taps on the transformers.

JJL provided the following services for the works:

- Full track-side survey to establish type/position of existing equipment and cable containment.
- Optioneering of outline design proposals for solution of existing problems.
- Detailed design of equipment locations, cable sizes, coordination (and settings) of protective devices, cable containment, transformer tap settings etc.
- Ensuring full compliance with BS7671 and Rail Track Group Standards



This project serves to highlight Jones-jack Ltd's capability to offer innovative designs which are tailored to the clients needs whilst complying with the Group Standards.

Client:	Balfour Beattie Rail Projects
Contractor:	BBRP
Value	£
Programme:	