

Access for all - New Footbridges

Alton, Aldershot & Wokingham

Frankham was appointed to provide multi-disciplined full design and construction supervision for the provision of three new footbridges with step free access at three SSWT Stations: Aldershot, Alton and Wokingham.

The Project involved Architecture, Civil and Structural Engineering, Building Services, Mechanical, Electrical and Lift design, CDM-C, 3D laser topographical surveys and gauging and soil investigation, as well as drainage design and cost control consultancy and construction management. All was managed by a Frankham Project Manager. Soil investigation works were mini tendered to three Frankham approved supply chain soil investigation companies to provide best value and firmly control Project costs.

From an early stage the project management had to consider management of the client and several third party interfaces. The construction phase was considered from the outset, reviewing track possessions through the WON and QP and enabling potential tenderers to be given clear indications of what access is available and how the bridges can be built safely and with minimum disruption to the operational railway. This extends to the designers producing a clear statement of construction method, which the appointed contractor can develop or start afresh with.

The Construction Management was carried out by a team headed by the Project Manager, with Quantity Surveyor and Designers in support.

The project was undertaken by SWT on the basis that Network Rail (NR) considered each structure would cost in the region of £3.2M and would take at least two years to deliver. Frankham took on the project with their initial tender estimate of £1.4M per location and with delivery within eighteen months, resulting in a substantial saving for the client and with an accelerated delivery date. The final cost came out c£1.3M per location and the project was delivered to the shortened programme. Total construction costs were c£4M.

Fees for design - from concept through outline and obtaining all necessary approvals - through to detailed design and management of the construction were £310K for the three sites combined.

With any railway project, effective communications and established relationships are necessary to understand the implications of change and to properly manage the process of change. Of key concern is arranging the Works to allow the station and the station staff to be able to operate with minimal disruption. Early involvement of these key participants was critical to this.

At Alton Station, the interface with the Heritage Watercress Line was developed and the additional numbers of disabled passengers from the nearby academy considered to ensure that an alternative facility is maintained throughout.

At Aldershot Station, access for reasonable crange was studied to include enabling works early into the construction.

At Wokingham, costs were allowed for staff to prevent 'runners' at the alternative track level crossing, and it was necessary to co-ordinate with the larger station redevelopment project.

The challenges of the project were to meet a tight design and construction timescale and deliver high quality products at specific dates, i.e. to meet overnight track closure possessions (pre-booked up to 12 months in advance by NR). In order to achieve this Frankham took time to challenge and further develop the brief with the client, to ensure that it closely aligned with the aspirations of all stakeholders. This exercise identified a fundamental error in the client's feasibility information and recommendations by others and on which initial important decisions had previously been taken and grant money from Department for Transport (DfT) had been secured. This further tightened the overall budget as the design had to accommodate work which had not been originally anticipated. The client's aspirations were discussed and formalised by close collaboration with Frankham's team and these extended to the inclusion of particularly high quality and durable finishes, again applying pressure to the budget. In order to achieve these requirements and avoid scope creep, Frankham undertook a preliminary design very early in the design process which allowed the in-house cost consultant to test and confirm that the client was able to afford those aspirations. In the detailed design and construction stage Frankham worked proactively with the main contractor and fabricators and suppliers to ensure that the significant milestones set in the DfT grant were achieved.



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South West Trains

Value:
£3.8 million

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Measured Building and Laser Scanning
Project Management
Structural Engineering
Topographical Surveying