

Extension to Existing Longrock Rail Depot

Location:
Penzance, Cornwall

Client:
C Spencer Ltd.

Value:
£20m



Civil Engineering

Structural
Engineering

Building Consultancy

Geotechnical and
Geoenvironmental
Engineering

Project Management

Specialist services

The work at Penzance was part of a wider commitment to the South West as part of the Network Rail £80m 'National Strategic Investment Strategy' for 2017 and beyond.



The project hit every major milestone through detailed planning and dedication by the project team. Our civil and structural engineers, experts in the rail sector, developed an innovative access and buildability strategy which allowed the depot to remain operational, and its services live, throughout the construction period.

Challenges and Successes

Maintaining full operational capacity of the depot whilst intrusive construction works were undertaken at the depot was a significant project challenge. The innovative structural solution adopted allowed the existing depot to remain operational throughout, thus enabling the main contractor to accelerate the project programme by 17 weeks. It also provided a positive segregation between operational and construction areas.

Further, due to the complexity of the reinforced concrete required to the heavy maintenance pits, it was agreed to detail these such that they could be formed off-site. This allowed a swift installation time and reduced site works, thus providing significant risk reduction and other Health & Safety benefits.

With the site being a mere 10m from the coastal breakwater, water ingress, flooding and the geotechnical designs were a significant concern. The foundation design and working methodology was adjusted to consider these risks and not only prevent issues during construction period, but also ensure longevity of the structure.

Core services

Civil Engineering /

Sectors

Transportation and Rail