



Technical and logistical know-how

KBR has the capability to tackle all aspects of design, construction and maintenance of railways and related infrastructure such as bridges, tunnels, stations and depots.

Australia-wide experience in railway engineering and project management enables us to meet the needs of different regions and terrains. As well as standard passenger lines, KBR has undertaken more than 30 light rail projects around Australia in recent years and helped deliver the 1420 km line between Alice Springs and Darwin, completing the visionary Adelaide to Darwin rail link.

Whether we are working in a remote part of the outback or a busy city centre, we have the technical and logistical know-how to deliver the project on time and within budget, and with minimal disruption to operations.



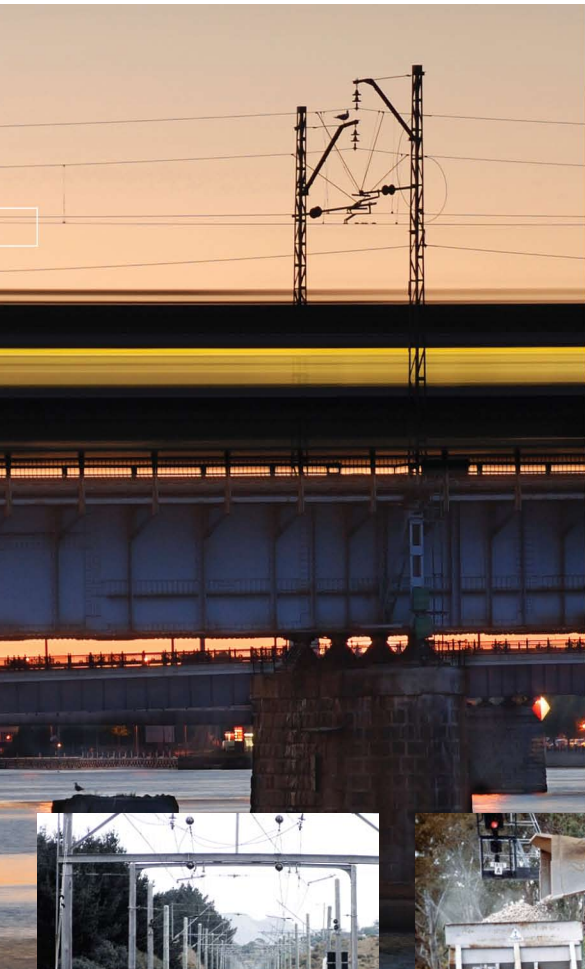
Main line upgrade, Victoria and New South Wales

The 830 km main line upgrade between Melbourne and Sydney demonstrates KBR's ability to design for construction in an operational rail environment. The major works program comprises nine 7 km passing lanes; gauge standardisation; the upgrade of track, rail bridges, and major freight facilities; consolidation of train control and signalling; and associated works. KBR is providing design for track, bridges and civil works; environmental and planning services; project coordination; and construction support.



Auburn maintenance facility, New South Wales

KBR has designed a maintenance facility that supports the largest passenger train order in Australian history. Through a NSW Government public private partnership, Reliance Rail is financing, designing and manufacturing 626 double-deck passenger carriages for Sydney's CityRail network and will maintain them for 30 years at the Auburn facility. KBR was responsible for major systems including tracks, overhead wiring, hydraulics for wastewater and stormwater, buildings, roads, car parks and a pedestrian bridge.



Bridges and tunnels

Civil and track work

Engineering studies

Environmental planning and studies

Freight terminals and load-out facilities

Infrastructure assessment and maintenance

Overhead traction

Signalling and information systems

Stations

**Wellington area rail project,
New Zealand**

KBR, in conjunction with Opus International Consultants, is providing engineering services for a NZ\$90 million duplication of 14 km of Wellington's metropolitan rail system. The duplication includes new overhead electric traction and new substations for traction power supply. KBR prepared the functional design and specification for the traction substations and provided concept development, detailed design and construction support for track and the traction masts and overhead wiring. KBR assisted the client in developing staging strategies in order to minimise disruptions to the rail corridor.

**Belair line renewal,
South Australia**

Working in close partnership with the John Holland Coleman Rail Joint Venture on a project for the Department of Transport, Energy and Infrastructure, KBR designed a 16 km passenger line upgrade in one of Australia's steepest and most challenging railway corridors. The design improved the track alignment, allowing higher operational speeds and increased clearances from structures and the adjacent ARTC freight line. KBR continued to the project's success to developing the joint venture's innovative subsoil pipe system to handle formation drainage through stations and narrow cuttings.

**CoalConnect Alliance,
Queensland**

This alliance with QR Network is delivering a 15 km track upgrade and a new 69 km heavy haul coal line as part of the Goonyella to Abbot Point rail expansion project, connecting existing freight systems and increasing coal tonnage capacity for export from Abbot Point. Within the alliance, KBR is providing track alignment design, survey management, project management, approvals management, consultation, engineering, documentation, programming, and engineering support during construction.



Facilities

Minerals

Transport

Water

KBR is a leading provider of engineering, construction and project management services, with a global reputation for reliability and technical excellence, and an unswerving commitment to workplace safety.

As engineering designers we are at the forefront in helping to improve the communities we serve, incorporating safety and sustainability factors into the planning, design and construction of our work.

Our aim is to build a healthier and safer world—meeting the needs of today's communities in a way that considers the needs of tomorrow.



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KBR

