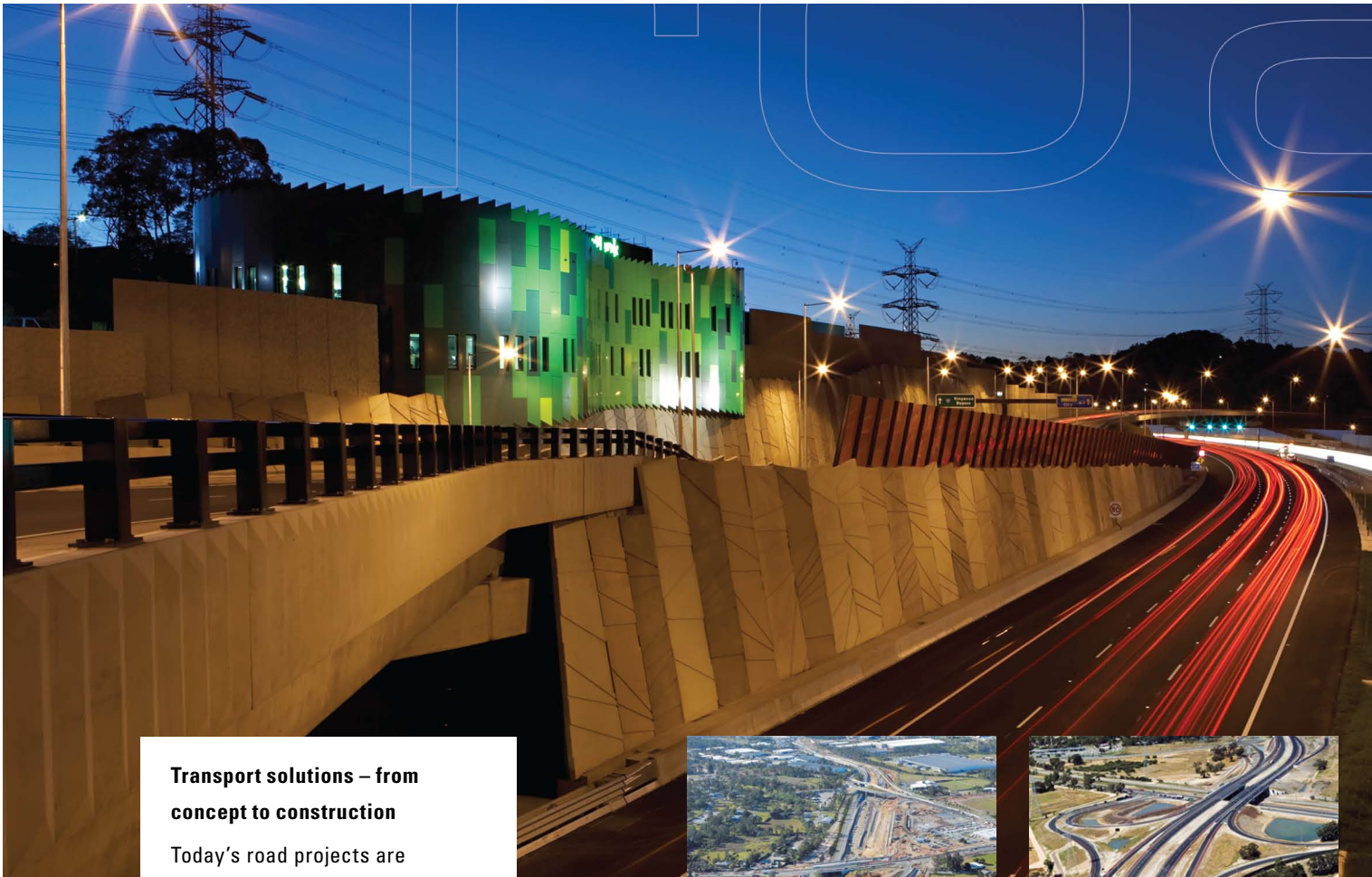


**KBR**



# roads



**Transport solutions – from concept to construction**

Today’s road projects are increasingly complex, calling for both innovation and proven expertise. Working across a range of delivery models, KBR has been a reliable and respected partner on some of the country’s largest transport infrastructure projects.

Our experience in all aspects of road design, environmental assessment, community consultation, finance, construction, operation and maintenance enables us to provide integrated transport solutions for public and private sector clients.

We have significant in-house highway design expertise in both rural and urban environments. Our projects range from motorways and toll roads to single-carriageway road and access improvements, including bypasses, ring roads and local residential streets.

With so many resources at the ready, KBR makes complex projects easy.



**Darra to Springfield transport corridor, Queensland**

South-east Queensland’s first integrated road and rail corridor features a 13.3 km four-lane motorway, five interchanges, grade separation to five local roads and stream crossings, retaining walls, noise barriers and a number of new road, rail and shared path bridges. As one of the design partners in The Horizon Alliance, KBR is providing project planning, project definition work, detailed design, construction support, commissioning, stakeholder engagement and project verification services. Several design innovations have reduced costs and construction impacts, and will deliver environmental benefits.



**Tonkin Highway extension, Western Australia**

KBR designed the road works, drainage and associated infrastructure for this \$130 million design and construct project to extend an existing dual carriageway by 18 km. The works included nine bridges, extensive local road layout alterations and an adjacent cyclist–pedestrian shared path. A 2 km Olympic-sized rowing course was excavated next to the highway; the earthworks were then used for the highway embankments. The project was completed 12 months ahead of schedule.

# KBR



- Community consultation
- Concept and detailed design
- Feasibility and route studies
- Hydrological, hydraulic and geotechnical studies
- Independent engineering services
- Planning and environmental assessment
- Project and construction management
- Proof engineering
- Transportation and economic studies

## Calder Freeway extension, Victoria

KBR designed the 22 km Malmesbury to Faraday link on the Calder Freeway, including 11 bridges, two full diamond interchanges, 13 km of local roads, eight wildlife crossings and noise attenuation measures. Considerable design effort went into maximising the on-site use of 6 million cubic metres of earthworks. Drainage blankets intercept groundwater, and road runoff is managed with best practice water-sensitive road design. Side tracks significantly assisted construction and temporary road realignments maintained existing traffic flows.

## Northern Expressway, South Australia

The 23 km dual carriageway highway – connecting Port Wakefield Road to the Sturt Highway, near Gawler – is the largest South Australian road infrastructure project in over 30 years. It also included intersections and a 12 km upgrade of Port Wakefield Road. KBR was one of the principal designers providing concept planning, environmental assessment and approvals, stakeholder engagement and concept design to the SA Department of Transport. With no specific freeway design standards available within the department, the KBR team drew on interstate and international guidelines to establish a set of design principles.

## F5 Freeway widening, New South Wales

KBR provided detailed design for a four-lane to six-lane upgrade between Brooks Road and Narellan Road, comprising approximately 11.5 km of widening in each carriageway. KBR's design satisfied all environmental requirements, while improving urban landscape and amenity. It has provided safer, more efficient travel for motorists, cyclists and road freight operators by reducing accidents, delays, through-traffic travel times and operating costs.

**KBR**

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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