

EXPERTISE

# OUR EXPERTISE BRIDGE INFRASTRUCTURE

CAPABILITY STATEMENT





## OUR COMMITMENT TO ZERO HARM

**AT BMD, THE SAFETY OF OUR PEOPLE, THE  
COMMUNITIES AND ENVIRONMENTS IN  
WHICH WE WORK HAVE BEEN A PRIORITY  
SINCE OUR INCEPTION IN 1979.**

Through our Zero Harm goal, BMD aims to ensure each and every person who comes into contact with our business remains safe and in good health whilst in our care. Jointly we are committed to minimising environmental harm through the implementation of best practice environmental management. Our Zero Harm goal encourages us to constantly strive to improve our workplace health and safety standards. It allows us to remain vigilant and accept our individual responsibility for our actions, and the implementation and continual improvement of our safety and environmental systems and methodologies.



**The BMD Group** has more than 1700 employees working throughout Australia and is supported by third party certified management systems, substantial balance sheet strength and the resources and flexibility of a large Australian owned private company.

# SPECIALIST EXPERTISE IN BRIDGE INFRASTRUCTURE

**NATIONAL** 1979  
COMPANY — ESTABLISHMENT —

**LOCAL INVESTMENT IN PEOPLE,**  
BUSINESSES AND THE COMMUNITY

**STRONG** HEALTH, SAFETY, ENVIRONMENT,  
QUALITY AND COMMERCIAL SYSTEMS

**BMD DELIVERS ON**

**PROJECT  
DELIVERY**

IN HIGHLY  
TRAFFICKED  
U R B A N  
CORRIDORS,  
AND REMOTE  
AND REGIONAL  
LOCATIONS

- | A PATH TO ZERO HARM
- | SPECIALIST INTEGRATED PROJECT TEAMS
- | QUICK AND EFFECTIVE DECISION MAKING







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# OUR BUSINESS

AS A BMD GROUP COMPANY, BMD CONSTRUCTIONS IS SUPPORTED BY THIRD PARTY CERTIFIED MANAGEMENT SYSTEMS, SUBSTANTIAL BALANCE SHEET STRENGTH AND THE RESOURCES AND FLEXIBILITY OF A LARGE AUSTRALIAN OWNED, PRIVATE COMPANY.

BMD Constructions offers civil construction services for major infrastructure projects throughout Australia. Expertise, experience and resources are applied across the industry sectors of transport, water, rail, port, resources, and oil and gas. Through highly experienced personnel, strong management systems and an uncompromised commitment to excellence, BMD Constructions ensures the timely and safe delivery of high quality projects across the country.

We engage in projects ranging in value from \$1 million to in excess of \$1 billion as a principal contractor, managing contractor and in joint venture with other major contractor and design partners. BMD Constructions sees our strengths in the quality of our people and the genuine relationships we build with clients, partners and communities.

BMD Constructions successfully undertakes a range of major road, highway interchange and bridge projects throughout Australia. We have a strong history of delivering bridge infrastructure projects across a range of challenging environments including:



→ **over rail**



→ **over water**



→ **within complex road overpasses**



→ **within highly trafficked urban corridors**



→ **within remote and regional locations.**

Our project teams play an important role in delivering vital infrastructure by increasing productivity and reliability by easing traffic congestion.

## WHAT SETS BMD APART?

BMD's ability to deliver high quality projects that meet client expectations is a testament to our project teams' commitment to client relationships and the implementation of effective and efficient management processes.



**national presence with local teams to leverage experience and deliver a unique offering**



**flat management structure which results in quick and effective decision making and close interaction with senior leadership**



**highly skilled and flexible teams**



**ability to optimise design outcomes through value engineering**



**financial capacity to work on large and complex projects**



**strong management systems to ensure the highest quality of work, industry leading safety standards and a commitment to protecting the environment**



**in-house structural and civil engineering expertise.**







AS PART OF THE BMD GROUP, BMD CONSTRUCTIONS IS PROUD OF OUR ABILITY TO BUILD LONG-TERM CLIENT RELATIONSHIPS AND SECURE REPEAT BUSINESS, WHICH HAVE BEEN THE FOUNDATION OF BMD'S SUCCESS SINCE INCEPTION.

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BMD CONSTRUCTIONS IS COMMITTED TO DELIVERING THE HIGHEST STANDARDS OF QUALITY, SERVICE AND VALUE FOR MONEY FOR OUR CLIENTS. OUR STRATEGY IS SIMPLE: VALUE OUR PEOPLE, COLLABORATE WITH OUR PARTNERS AND CONTINUE TO DELIVER EXCEPTIONAL PROJECTS WITH SUSTAINABLE OUTCOMES THROUGH EXPERTISE AND KNOWLEDGE SHARING.

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# THE BMD WAY



## LOCAL INDUSTRY PARTICIPATION

In line with the BMD Group's approach to business, BMD Constructions' operations are firmly underpinned by a philosophy to 'support the local communities in which we operate' – a philosophy that was well established long before local industry participation initiatives were formally introduced.

BMD's mission is to professionally manage our suppliers and subcontractors to achieve the best possible outcomes for our clients, including aiding in the development of the local industry.

Since establishment in 1979, BMD has employed a policy of engaging locally based suppliers and owner operators. This policy serves to maximise the opportunity for local input with flow on effects in the training and development of locally based staff engaged on our projects. We are proud of the long-term, key supplier relationships that have developed as a result of this philosophy.

## COMMUNITY AND INDIGENOUS ENGAGEMENT

Building on the Group's founding philosophy, BMD Constructions approaches each project individually, actively identifying opportunities for local community engagement and participation that will provide beneficial outcomes for the project team, client and local community alike.

We work in partnership with Indigenous and non-Indigenous organisations who embody our values to achieve long lasting benefits in areas including health and wellbeing, arts and culture, job creation, environment, and social and community development.

Our continued focus is on equal opportunities and increasing our commitment to Indigenous engagement across the Group to create a diverse workforce. We formally committed to this through the development of a Reconciliation Action Plan (RAP) which was released in 2017. Through the RAP we have set clear and realistic targets to contribute meaningfully to 'closing the gap' and increasing Indigenous employment and training initiative targets at BMD.



## DELIVERING ON OUR ZERO HARM GOAL

The safety of our people, environment and the community are our highest priority and BMD is committed to improving our safety culture and striving to achieve our goal of Zero Harm.

BMD holds a number of industry recognised multi-site certifications for health, safety, environmental and quality management systems, as part of its integrated Business Management System. BMD's management system allows for flexibility on a project by project basis, while ensuring the client's requirements are addressed and the project is delivered in full compliance with the relevant specifications and regulations.

We are proud of our achievements in safety, environment and quality and we are determined to further our commitment to a level that makes the BMD Group synonymous with excellent performance, regardless of the challenges in any project we undertake.



QUALITY



SAFETY



ENVIRONMENT





### CAMDEN VALLEY WAY STAGE 3

LEPPINGTON, NSW | \$70 MILLION

ROADS AND MARITIME SERVICES

**Camden Valley Way is a major arterial road linking the Hume Highway, M7 and M5 interchange at Leppington in Sydney's south-west. BMD Constructions was engaged to upgrade 3.3 kilometres of the existing two lane single road, from the Cowpasture Road and Bringelly Road intersection to Ingleburn Road, into a four lane divided dual carriageway with a shared pedestrian and cyclist path.**

The project included the construction of three bridge structures including new twin, three-span plank bridges over Bonds Creek; a single-span land bridge over Jemena's high pressure eastern gas pipeline; and demolition of the existing bridge over the 1880's Sydney Catchment Authority's heritage listed Upper Canal, enabling the installation of a new super "T" girder single span bridge.

The project team overcame a number of complex challenges, including working in and around multiple high pressure gas mains and the historic Upper Canal structure, by maintaining a high level of interaction with the asset owners, establishing exclusion zones and securing approvals for specific works in close proximity to the services.

Throughout the project, BMD worked closely with the client to employ a 'one team' focus, further strengthening the existing client relationship. This relationship was supported through positive communication and the demonstration of BMD's commitment to safety, quality and program.

BMD adopted a strong safety first culture which fostered a sense of security, knowing the team was engaged in ensuring everyone returned home safely to their families at the end of every working day.

Ensuring safety while working at heights was a technical complexity that BMD proactively addressed over the duration of the project. In the preconstruction stage, BMD ensured fall protection for construction was incorporated into the design of the three bridge structures. In conjunction with subcontractors, BMD provided the ferrule detail to the precast supplier who incorporated it into the outer beams to support proprietary walkway systems to suit the construction of each bridge deck and concrete barrier.

The project team displayed an excellent safety culture, achieving more than 333,000 hours lost time injury free over the duration of the project, despite complex works completed adjacent to high volumes of traffic.

This was supported by robust safe work method statements and the completion of comprehensive job hazard analysis cards, combined with detailed reporting of any near miss incidents to ensure learnings were disseminated back through the team and negated the possibility of repeat occurrences.

BMD successfully delivered an essential upgrade that will ultimately contribute to increased efficiency of the road system, reduce congestion and improve safety for motorists, pedestrians and cyclists.



## ENVIRONMENTAL COMMITMENT

BMD is committed to preventing environmental harm to the ecosystems and communities in which we operate.

BMD ensures compliance with all relevant environmental management legislation, regulations and codes of practice mandated within the states and territories where we operate. We have developed, and will continue to sustain, a culture of environmental awareness within our workforce and support all employees in the implementation of environmental procedures and processes.

Our environmental management performance has also been recognised through multiple industry awards for environmental and construction excellence.





**220 TONNE MOBILE CRANE INSTALLED THE BRIDGE BEAMS**

**220 METRES LONG IN TOTAL BETWEEN THE TWO BRIDGES**

**SIX-SPAN OVER THE BOHLE OVERFLOW**

**FIVE-SPAN OVER THE BOHLE RIVER**

**209 PILES**

## DALRYMPLE ROAD UPGRADE

TOWNSVILLE, QLD | \$29 MILLION

TOWNSVILLE CITY COUNCIL

**Dalrymple Road is an increasingly important link for Townsville's high growth area leading to the city's northern beaches and prior to the upgrade was susceptible to flooding. During Townsville's monsoonal wet season, the previous low level crossing at the Bohle River became inundated with flood water, requiring road closures for up to six weeks at a time.**

BMD Constructions was contracted for the Dalrymple Road Upgrade, which involved the construction of two bridges, flood proofing this section of road, minimising delays and easing traffic congestion for the residents and businesses in this area of Townsville.

Prior to commencing works on the site, the area around the Bohle River was an unofficial dumping site. Over the years, numerous car bodies, construction and household waste accumulated throughout this area. The project team quickly saw the opportunity to clean up, adding to the environmental amenity and reducing the possibility of this waste being taken by flood waters into the Bohle River.

The environmental aspect of the project was managed through the use of an Environmental Management Plan (EMP), incorporating numerous sub-plans for erosion and sediment control, and water quality. The result was no recordable incidents on the project due to the necessary care, planning and attention to not only maintain current standards but also improve the natural environment, wherever possible.

The successful implementation of the EMP including thorough planning and rigorous assessments, further assisted in meeting a strict construction program to ensure that all works in and around the Bohle River were completed prior to the wet season. This minimised the environmental impact on the river system from storm runoff.

Wherever possible, the re-use of materials onsite was undertaken to reduce the overall environmental impact, reduce the project's footprint and promote natural revegetation of the wetland. BMD re-used the cleared vegetation as mulch for sediment controls and batter protection, streetlight poles, topsoil amelioration and the re-use of steel.

## KEY OUTCOMES

- Completed the overall project two months ahead of schedule in a tropical monsoon region, at an exceptionally high standard of quality.
- Achieved outstanding results in key construction areas including safety, training, environment, stakeholder engagement, regional development, whole of life, program and commercial.
- Supported regional development in Townsville through an active local industry participation plan resulting in 95% of work invested with local contractors.
- Fostered a dedicated safety training culture program which achieved 95,000 hours lost time injury free.



*"BMD was extremely proactive in identifying potential issues and adapting the programme of works to ensure the project remained on track. Townsville City Council were appreciative of the BMD team's regular communication regarding community consultation, issues and resolution to stakeholders. The standard of workmanship on the project was very high and safety was a strong focus for the team and was always a key component of any decisions, with the safety outcomes speaking for themselves. The project opening two months ahead of schedule on a planned 11 month project, is an extremely significant achievement and Townsville City Council commend BMD's hard work in achieving this."*

**Brendan Quabba, Executive Manager Engineering Services,  
Townsville City Council**





## WORKING IN LIVE, OPERATING ENVIRONMENTS

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BMD brings a wealth of experience working in live, operating environments including airports, ports, railway corridors, resource terminals, and defence facilities.

Understanding the need to construct safely, while maintaining operations, means our project teams are able to effectively stage works, delineate work sites, manage nearby stakeholders and ingress and egress access from secure areas without incident.





## OLYMPIC HIGHWAY REALIGNMENT – KAPOOKA BRIDGE

KAPOOKA, NSW | \$30 MILLION

ROADS AND MARITIME SERVICES

The existing Kapooka Bridge, located near Wagga Wagga was originally built in 1880 and was a traffic blind spot. BMD Constructions was engaged to undertake the realignment of the Olympic Highway, including a new road bridge over rail, construction of 3 kilometres of greenfields highway, and a new interchange to the Blamey Barracks.

Construction of the bridge required management of the rail corridor while works were undertaken over the main Sydney to Melbourne railway line. Building the bridge over a live rail line inherently involved risks, including working at heights and placing large beams. As a highly experienced bridge contractor, BMD Constructions worked innovatively to overcome these collective risks.

The most significant obstacle was having to time the works in between trains, which limited the number of actual work hours during the day. BMD Constructions developed a positive relationship with the rail operator through demonstrated competency and solid engagement including monthly meetings, workshops and direct contact. The project team successfully managed works in between trains, maximising the hours worked during the day, overcoming the challenges involved with working within a live rail corridor.

### KEY OUTCOMES

- BMD Constructions balanced cost, program and safety to successfully meet construction deadlines, despite the wet weather and unpredictable challenges that presented due to the remote location.
- Contributed to BMD's Zero Harm goal, achieving over 239,000 hours lost time injury free and a total recordable injury frequency rate of six.
- The project was located in an important environmental area, on biodiversity certified land, which was managed successfully through the implementation of nest boxes and crossings for fauna to improve squirrel glider movement in the corridor and habitat within the project area.



*"The BMD team delivered an innovative and effective option to build a new bridge north of the existing bridge and realign the highway to the east in this regional area of New South Wales.*

*The project team delivered a program that incorporated several important milestones that contributed to construction efficiency and risk mitigation. The successful delivery of all traffic switches can be attributed to the commitment and dedication demonstrated by the project management team.*

*The delivery of the project on time and on budget while also achieving no serious safety or environmental incidents has been highly regarded.*

*With the realigned highway now open, the project has achieved its objective of improving road safety, improving freight efficiency and reducing travel times along this stretch of road which has a history of crashes which is a testament to the highly effective and collaborative BMD team."*

**Anthony Perera, Project Manager,  
Roads and Maritime Services**



**WON THE 2017 CIVIL CONTRACTORS FEDERATION  
NEW SOUTH WALES EARTH AWARD FOR  
CATEGORY 5 (PROJECT VALUED BETWEEN  
\$30 MILLION TO \$75 MILLION) RECOGNISING THE  
PROJECT'S EXCELLENCE IN INFRASTRUCTURE  
AND ENVIRONMENTAL MANAGEMENT.**



## REMOTE AND REGIONAL EXPERIENCE

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With extensive experience working for clients in a range of geographical areas, BMD understands the specific challenges that constructing in remote and regional communities presents.

Since BMD's establishment, we have attributed many of our successes to the relationships we have been able to establish with local communities, clients, subcontractors and material suppliers.

It is these relationships with local businesses that provide a true understanding of remote operating environments. Our proven reputation in these regional communities is built on continued strong performance and collaboration, as well as our experience and ability to ensure resourcing and site requirements are managed quickly and effectively through our relationship based model of contracting.





97.7 METRES LONG

TWO HEADSTOCKS

THREE PIERS

FOUR SPANS

12 GIRDERS

## FORTESCUE RIVER BRIDGE REPLACEMENT

NEWMAN, WA | \$9 MILLION

MAIN ROADS WESTERN AUSTRALIA

**Approximately 1200 kilometres north of Perth, the Fortescue River Bridge is located in an extremely remote area and was renowned for flooding after heavy rains.**

BMD Constructions together with MACA formed the BMD MACA JV, and were engaged to demolish the existing bridge, construct a new four-span bridge across the active Fortescue River and realign 2 kilometres of Marble Bar Road.

The project team implemented a 'top down' construction technique to design and construct a temporary causeway finished to the soffit level of the headstock to provide an all-weather access across the river. After placement of the bridge's beams, the causeway was excavated and the materials used in the causeway were then re-used in the embankment and abutment rock protection, to limit wastage.

The site's remote location amplified significant technical complications due to distance, time and inaccessibility of being able to identify quick responses to complex situations. Solving technical problems presented numerous risks, however due to collaborative teamwork and detailed planning, the project was completed two months ahead of schedule with no injuries recorded for the 40,000 hours worked.

The BMD MACA JV maintained a best practice model through open, honest and timely communications, and significant pre-planning for the extremely remote region resulting in solid execution. This collaborative resulting in approach to contracting allowed the team to seek the best solution for problems identified, which resulted in best for project outcomes.

Marble Bar, Jigalong, Nullagine and other remote Aboriginal communities now have more reliable access to their communities. The new bridge and approaches have delivered necessary flood mitigation infrastructure that will alleviate delays caused by flooding and provide improved access to east Pilbara.

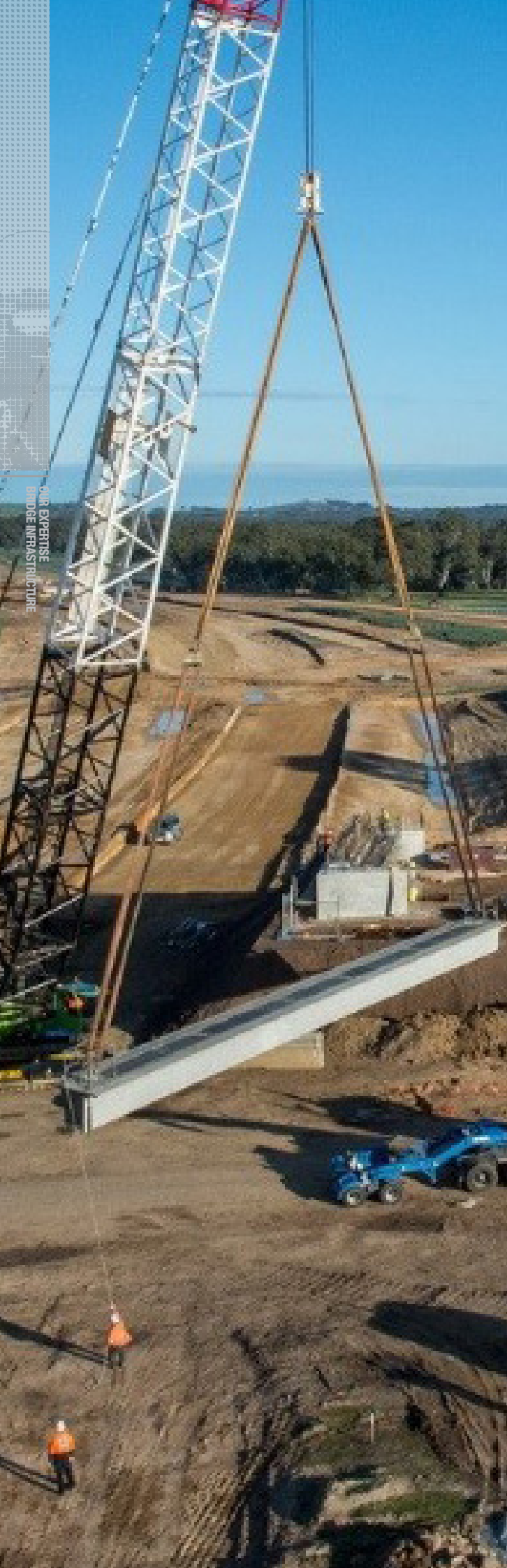


*"The BMD MACA JV initiated an innovative and effective construction plan to complete the works in what can only be described as a high risk, bridge construction site in an extremely remote area of Eastern Pilbara in Western Australia.*

*The project team's plan incorporated several important milestones that contributed to construction efficiency and risk mitigation. BMD MACA JV were proactive and very pleasing to work with. The staff were enthusiastic and technically more than capable of undertaking and understanding the works. Their record keeping was completed to a particularly high standard and was presented in a timely fashion as and when required. The work was completed to a good standard, meeting our expectations and has been highly regarded post construction within Main Roads WA."*

**Andrew Pyke, Regional Manager, Main Roads WA**





## STAKEHOLDER AND COMMUNITY MANAGEMENT

BMD has been committed to providing lasting legacies to the communities in which we operate since our inception in 1979.

Many of our operations occur within highly urbanised areas and involve significant interaction with the local communities. Effective management of construction challenges, coupled with open communication and collaboration with local stakeholders, minimises impacts and builds awareness and understanding amongst the local community.

Stakeholder and community relations is identified as the role and responsibility of everyone that is involved in the delivery of BMD projects, not just the community relations team. BMD works with clients to ensure projects have sufficient stakeholder management plans and the resources needed to lead positive engagement outcomes.

Our corporate systems have been developed to deliver the highest standards ensuring we are able to effectively and safely stage works, delineate worksite, manage and communicate with nearby stakeholders, and safely ensure access from secure areas without incident and impact on business operations or the community.





## BUANGOR BYPASS

BUANGOR, VIC | \$46 MILLION

VICROADS

**BMD Constructions was engaged by VicRoads as the head contractor to deliver the Buangor Bypass upgrade in Buangor, Victoria. As one of Victoria's busiest rural roads, the project is a significant freight route and services trade while supporting the farming industry, regional tourism and local communities.**

The project involved the construction of duplicate carriageways to bypass the township of Buangor, as well as the construction of three new bridges over Billy Billy Creek and a new interchange and highway overpass at Peacocks Road. The existing carriageway also required realignment and two new roundabouts were constructed at key access points to the township.

Due to the high level of project interest from the local community and the environmentally sensitive footprint of the works, proactive management of stakeholder issues was of paramount importance.

BMD worked effectively to ensure the least amount of damage possible when constructing the three bridges over Billy Billy Creek, a habitat for federally protected fauna. The project team rationalised the design in a number of areas to save significant native vegetation including approximately 500 trees.

During the project, BMD planned and executed a variety of strategies to engage with the community. Strong relationships were sustained throughout the duration of the works and BMD managed and applied a variety of stakeholder management techniques including face to face interactions with key stakeholders; dissemination of newsletters, information bulletins and letters; development of stakeholder issue analysis and communication plans; and community events to allow for active participation within the community.

The project team undertook numerous community legacy activities including sponsorship of local business awards, providing a BMX track for the local community, repurposing water bores which were used for site construction for use by the local cricket club, and collaborating with the local school to select coloured paint for the project's bridge.

The Buangor Bypass project has delivered substantial benefits to the local community including less heavy freight vehicles and interstate drivers through the area, resulting in safer roads and improved traffic conditions.

## KEY OUTCOMES

- **The team's commitment to safety was uncompromising during construction with the project remaining lost time injury free for the 152,000 hours that were worked.**
- **The main alignment opened three months ahead of schedule.**
- **Through continued collaboration, all commercial claims were able to be resolved prior to practical completion.**



*"BMD completed the Buangor Bypass contract for VicRoads on the Western Highway. The project was completed ahead of the original schedule and within the approved project budget. The BMD team worked extremely well within the Buangor community to deliver the works. BMD were very collaborative in working with VicRoads to address and resolve sensitive environmental and community issues that arose during the project."*

**Mick McCarthy, Project Director,  
VicRoads, Western Highway Project**





## INNOVATIVE CONSTRUCTION METHODS

BMD works in close collaboration with clients and partners identifying opportunities to significantly improve designs, plans, construction methodologies and practices, ensuring best for project outcomes.

With the experience of BMD project teams comes innovative design and construct solutions to exceed client and community expectations. Our emphasis on strong working relationships is filtered through project teams and project management processes and techniques. The outcome of these strong relationships are high performing teams, who are able to deliver innovative solutions to achieve project goals.



*"A great example of innovative design on the Port Connect project was the solution developed for the Pritchard Street Overpass area. Competing requirements of motorway geometry, bridge design, structure and approach foundation treatments, flood immunity, cross-drainage relocation, services relocation, water quality management, construction and maintenance access and urban design treatments were managed, all within a very restricted footprint immediately adjacent to local businesses. That this portion of the project was so seamlessly delivered is testament to the hard work and creative thinking of the design team."*

**Allan Uhlmann, Project Manager,  
Department of Transport and Main Roads**







## SIX BRIDGES

**GREEN BRIDGE (A BRIDGE OVER A GREEN CORRIDOR AND CREEK) – 18 METRES LONG**

**SEWER BRIDGE (A BRIDGE OVER AN EXISTING SEWER LINE) – 30 METRES LONG**

**BULIMBA CREEK OXBOW VIADUCT – 269 METRES LONG**

**PRITCHARD STREET OVERPASS – 119 METRES LONG**

**BULIMBA CREEK BRIDGE – 105 METRES LONG**

**LINDUM CREEK BRIDGE – 21 METRES LONG**

### PORT OF BRISBANE MOTORWAY UPGRADE

BRISBANE, QLD | \$268 MILLION

DEPARTMENT OF TRANSPORT AND MAIN ROADS

**The Port of Brisbane Motorway is the key road corridor servicing the Port of Brisbane. With an overall government value of \$385 million, the Port of Brisbane Motorway Upgrade for the Department of Transport and Main Roads (TMR) was delivered by Port Connect.**

Providing a 3 kilometre duplication of the existing two lane motorway, as well as a 3 kilometre extension, the motorway has six new bridge structures, of which five traverse the waterways of the Brisbane River estuary.

The project delivered a new interchange with an overpass between Lytton Road and Pritchard Street which was 119 metres in length. The original reference design presented significant safety challenges in terms of staged construction in live traffic, particularly through the section of Lytton Road colloquially known as 'roll-over bend'. This section of Lytton Road also includes a multitude of strategic public utility and plant assets serving the Port of Brisbane, surrounding oil refineries and local industry. Significant risk, time and cost would have been associated with relocation and/or protection of these essential services. Consequently, these reference design challenges required attention early in the design process. This necessitated development of numerous innovative and value engineered design solutions, actively supported by the project management and leadership teams.

The team eliminated both risks during the double early contractor involvement tender process developing a solution which allowed construction to occur completely off-line, and also avoided having to relocate essential services. This represented a complete departure from the reference design. The innovative structural solution comprised of a four-span 55 degree skewed bridge constrained by property boundaries, existing services, drainage channel and vertical clearances.

The unique alignment design for the connection and extension of Pritchard Street required an unusual bridge to span over the new motorway on a very high skew and on a very narrow site surrounded by existing buildings.

In order to fit between existing properties and cross over the new motorway with an economical span configuration, a skew of 55 degrees was required for the bridge piers. Typically, skews on bridges are limited to 30 degrees.

The high skew presented structural design complications which required rigorous analysis to ensure the adopted composite Super-T girder and deck slab system would perform as required with the unusual geometry.

This thoroughness in the design and construction phases ensured the success of this component of the project on the very narrow site available. The finished bridge fits neatly into its surrounds and appears that the neighbouring buildings were built around the bridge, rather than the other way around.

The motorway now separates heavy, port-bound vehicles from local traffic and delivers road geometry well-suited for heavy vehicles, greatly reducing the risk of road safety incidents.

### KEY OUTCOMES

- **The motorway opened to live traffic eight months ahead of schedule, resulting in immediate economic benefits approaching \$16 million through enhanced travel efficiencies and safety.**
- **BMD's design and construct solutions significantly reduced impacts to traffic, managed project risks and achieved critical cost and time objectives.**
- **The project team's focus in the value of workmanship and project commitment resulted in exceptional quality, further enhancing value for the client.**



**WON 2012 PROJECT SAFETY EXCELLENCE  
AWARD BY THE QUEENSLAND MAJOR  
CONTRACTORS ASSOCIATION.**

# THE BMD EXPERIENCE

## RAIL



### LONDON STREET BRIDGE REPLACEMENT

PORT LINCOLN, SA | \$4.5 MILLION  
CITY OF PORT LINCOLN

The new London Street Bridge in Port Lincoln was successfully delivered on track, providing a safer crossing over the rail line. The new bridge is 19 metres long and is made up of 23 planks weighing 20 tonnes each.



### THOMPSONS ROAD UPGRADE - STAGE 1

CRANBOURNE, VIC | \$50 MILLION  
VICROADS

The project involves removing the Thompsons Road level crossing through the construction of a six-lane bridge over the railway line. The bridge is constructed separately in two three-lane bridges to minimise disruption to road and rail users.



### DINMORE AND GRACEVILLE STATION ACCESSIBILITY UPGRADES

IPSWICH AND BRISBANE, QLD | \$24.7 MILLION  
QUEENSLAND RAIL

BMD delivered a new pedestrian overpass at Dinmore Station. Close collaboration with Queensland Rail and detailed planning of works during track possessions allowed for necessary upgrades to be completed safely and efficiently.



### WULKURAKA STATION ACCESSIBILITY UPGRADE

IPSWICH, QLD | \$12 MILLION  
QUEENSLAND RAIL



### BOMEN ENABLING ROADS PROJECT

WAGGA WAGGA, NSW | \$35 MILLION  
WAGGA WAGGA CITY COUNCIL



### MELTON HIGHWAY LEVEL CROSSING REMOVAL

SYDENHAM, VIC | \$38 MILLION  
THE LEVEL CROSSING REMOVAL AUTHORITY (LXRA)





### THIRD AVENUE BRIDGE REPLACEMENT

PERTH, WA | \$9.1 MILLION

MAIN ROADS WESTERN AUSTRALIA

**BMD Constructions replaced an aging bridge over the Midland rail line with a new single span 22 metre bridge. With train services every five minutes during peak times, the works were completed behind a general exemption fence and works within the rail corridor were completed during rail shutdowns.**

The project was delivered in a very constrained site in the middle of an established residential area, further complicated by the presence of a busy principal shared path which ran through the site, and was successfully kept open at all times.



**WON 2017 CIVIL CONTRACTORS  
FEDERATION WESTERN AUSTRALIA  
CATEGORY 3 EARTH AWARD  
(PROJECT VALUED \$5 MILLION  
TO \$10 MILLION).**

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*“As the Superintendent's Representative on the project, I was very impressed with BMD's performance. Their professionalism and detailed planning of the works has been exemplary, and their careful handling of the interface with Public Transport Authority (PTA) has been particularly important.*

*BMD developed a very good working relationship with PTA, and their detailed planning of weekend shutdowns, which included convening a number of planning workshops involving all stakeholders and providing an hour by hour program to PTA for the shutdown duration, was highly impressive. The demolition works were expertly managed and this led to the demolition being completed successfully and the rail reopening 6 hours ahead of schedule.*

*Overall, I was very pleased with the quality of work delivered by BMD due to the project's programming of works. I would be very happy to work with BMD again on similar projects in the future.”*

**Anthony Morrow, Superintendent's Representative,  
Main Roads Western Australia**

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## ROAD



### GATEWAY SHOPPING CENTRE - PEDESTRIAN BRIDGE EXTENSION

PALMERSTON, NT | \$1.5 MILLION  
NESSFALL PTY LTD



### BOUNDARY ROAD INTERCHANGE UPGRADE - BRUCE HIGHWAY

NARANGBA, QLD | \$55 MILLION  
DEPARTMENT OF TRANSPORT AND MAIN ROADS

The Boundary Road Interchange was opened six months ahead of schedule. The new six-lane bridge is 110 metres in length over the busy Bruce Highway. BMD Constructions placed 68 girders, with lifts conducted during night shifts in very short windows to avoid impacting highway traffic.



### CAIRNS BRUCE HIGHWAY UPGRADE – SHEEHY ROAD TO RAY JONES DRIVE

CAIRNS, QLD | \$111 MILLION  
DEPARTMENT OF TRANSPORT AND MAIN ROADS

CairnsConnect delivered six bridges as part of the project which required 188 piles. The 460 metre-long composite steel truss pedestrian bridge presented technical complexities. The bridge consisted of over 5000 individual components, and over 25,000 bolts. Spans were lifted over the Bruce Highway and rail corridor, each in single nights with a 450 tonne crane. The Bruce Highway was never shut during these operations, only diverted, and Queensland Rail required no changes to their scheduling.



### MONARO HIGHWAY DUPLICATION

FYSHWICK, ACT | \$18.8 MILLION  
ACT SHARED SERVICES PROCUREMENT



### GOLDSMITH DRIVE BRIDGE

NOARLUNGA, SA | \$1.9 MILLION  
DEPARTMENT OF TRANSPORT, ENERGY  
AND INFRASTRUCTURE



CAIRNSCONNECT WON 2014 CIVIL CONTRACTORS FEDERATION QUEENSLAND  
CATEGORY 5 EARTH AWARD (PROJECT VALUED MORE THAN \$75 MILLION)  
AND 2014 ENGINEERS AUSTRALIA QUEENSLAND ENGINEERING EXCELLENCE  
AWARDS CATEGORY 7 (PROJECT VALUED OVER \$50 MILLION).



# THE BMD EXPERIENCE

## WATER



### BRUCE HIGHWAY BRIDGE UPGRADE (CATTLE CREEK AND FRANCES CREEK)

INGHAM, QLD | \$118.9 MILLION  
DEPARTMENT OF TRANSPORT AND MAIN ROADS



### COLLIE RIVER BRIDGE

TREENDALE, WA | \$14.5 MILLION  
MAIN ROADS WESTERN AUSTRALIA

The 224 metre-long, 14.4 metre-wide, six-span steel and composite bridge was delivered via an alternate launch method which saved cost and time. BMD Constructions poured the bridge deck prior to launching, and then pushed the bridge superstructure from the bank out over the piers. This method was adopted due to the very poor ground conditions on the southern side of the river which would have been unable to support a large crane to lift the beams into place.



### PRINCES HIGHWAY DUPLICATION – WURRUK TO SALE

SALE, VIC | \$32.9 MILLION  
VICROADS



### SCHOFIELDS ROAD UPGRADE STAGE 3 – VERON ROAD TO RICHMOND ROAD

SCHOFIELDS, NSW | \$68 MILLION  
ROADS AND MARITIME SERVICES

BMD Constructions placed 952, 18.4 tonne bridge planks across two bridges - a 422 metre twin bridge structure across Eastern Creek and a 175 metre twin bridge structure at Bells Creek. These bridge works form an essential part of the upgrade in flood-proofing what will become a major arterial road in Western Sydney.



### ASHLEY DRIVE UPGRADE STAGE 2

CANBERRA, ACT | \$16.5 MILLION  
ACT PROCUREMENT AND CAPITAL WORKS



### COOLUP EAST BRIDGE REPLACEMENT OVER MURRAY RIVER

COOLUP, WA | \$6.9 MILLION  
MAIN ROADS WESTERN AUSTRALIA

# THE BMD GROUP

BMD IS A NATIONAL GROUP OF COMPANIES ENGAGED IN ENGINEERING DESIGN, CONSTRUCTION AND LAND DEVELOPMENT FOR CLIENTS AND PARTNERS IN THE URBAN DEVELOPMENT, TRANSPORT INFRASTRUCTURE, RESOURCES AND ENERGY SECTORS.



**BMD Constructions** offers civil construction services for major infrastructure projects throughout Australia. Expertise, experience and resources are applied across the industry sectors of transport, water, rail, port, resources and energy. The company engages in projects ranging in value from \$1 million to in excess of \$1 billion as a principal contractor and in joint venture with other major contractor and design partners.



**BMD Industrial**, a division of BMD Constructions, is managed by a group of highly experienced industry executives who assemble professional project teams to deliver structural, mechanical, piping and electrical solutions for a diverse range of clients and industries.



**BMD Urban** is a specialist civil and building contractor to the urban development industry. The company draws on significant industry experience and utilises management systems, delivery methodologies and a relationship based approach that is specifically tailored to the needs of this industry. Integrated services can be offered in partnership with Empower Engineers & Project Managers, JMac Constructions and Urbex to achieve seamless and cost effective project delivery.



**Empower Engineers & Project Managers (Empower)** provides superior civil, structural and geotechnical engineering design and project management services. Empower's experience includes residential, commercial and industrial developments, infrastructure, and resource and energy projects across metropolitan, regional and remote areas. Key services include planning and feasibility studies, road infrastructure design, flood studies, land development and services design, water quality and stormwater management, structural engineering and shoring, and foundation design.



**JMac Constructions (JMac)** specialises in all aspects of landscape construction including residential, commercial, industrial, public infrastructure, environmental rehabilitation and long term care and maintenance. From street scapes, buildings, boardwalks, public structures, stone entry statements, playgrounds and parklands, JMac has the ability to successfully construct and create unique landscapes of all shapes and forms.



**Urbex** is an innovator in residential and commercial development, undertaking wholly owned projects and joint ventures in developments of varying scale and size. Harnessing leading talent in project structuring, planning, management, delivery and marketing, Urbex delivers excellence in the creation of new communities to meet the lifestyle needs of Australians today and into the future.





WE SEE OUR STRENGTHS IN THE QUALITY  
OF OUR PEOPLE AND OUR GENUINE  
RELATIONSHIPS WITH CLIENTS, PARTNERS  
AND COMMUNITIES.

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WE SEE OUR SUCCESS LINKED TO OUR  
ABILITY TO DELIVER CERTAINTY THROUGH  
CONSISTENT PERFORMANCE AND  
COLLABORATION.

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WE SEE OUR FUTURE SHAPED BY ALL THAT  
HAS MADE US SUCCESSFUL IN THE PAST.

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