



# EXPERTISE

## OUR EXPERTISE AIRPORT INFRASTRUCTURE

CAPABILITY STATEMENT



# OPENING REMARKS BY MICK POWER AM

I am delighted to introduce BMD's capability in the delivery of airport infrastructure.

BMD has delivered a significant volume of air and landside works for our clients operating airport infrastructure throughout Australia.

Since our first early works package at the 1st Aviation Regiment Robertson Barracks in Palmerston Northern Territory, BMD has developed the necessary skills and expertise required for the successful delivery of airport infrastructure.

Our clients benefit from this expertise with project challenges overcome, efficiencies realised though lessons learnt, unwavering quality standards and most importantly, projects delivered without incident.

We have worked on airport projects from as far as Perth to Sydney and Townsville to Whyalla, and have demonstrated our expertise with a range of clients. One of these is our long association with Brisbane Airport Corporation (BAC).

Over the course of our long standing relationship with BAC, we have successfully delivered a number of projects for both airside and landside, which is a testament to BMD's dedication to repeat-business.

Our project teams' diligence and commitment to safety ensures seamless security amidst a fully operational airport.

I truly believe that airports are the gateways to our cities, towns and regions, whether they be in Brisbane or Busselton. I look forward to delivering more airport expansion projects, as well as new airport infrastructure across the country for our valued clients, utilising the skills and expertise that our great people hold.



**Mick Power AM**

*BMD Group Board Chairman and Managing Director*



# EXECUTIVE INTRODUCTION BY SCOTT POWER



Since BMD's establishment, we have galvanised our culture and founding company values in everything we do. This is particularly evident in the highly skilled and loyal team that specialises in airport, logistics and transport infrastructure delivery.

From this document you will see the wealth of experience that BMD has garnered and I am so very proud to say that it is through the dedication of our team we have maintained our ability to deliver to the highest of standards.

Some of our people have been with BMD for more than 20 years. They understand the needs of our clients and are experienced in airport security protocols and compliance. Our people recognise the importance of things running smoothly and maintaining day to day operations in a constrained environment and are experienced in minimising the impacts of construction works.

We see our strengths in the quality of our people and our genuine relationships with our clients and partners. We understand the complexities of airside and landside airport infrastructure works and develop strong working relationships with our clients to ensure projects are completed to budgets, with minimal impacts on stakeholders and the surrounding environments. Backed by our own robust management systems, we work within our clients' systems to ensure a seamless security interface is maintained at all times. We are consistently motivated to achieve the best outcomes for our clients.

Each project we undertake is different to the next but through the extensive experience of our talented team, we are able to recognise and understand the needs of the job and are able to implement the appropriate measures to achieve outstanding results.

A handwritten signature in black ink, appearing to read 'Scott Power', with a stylized flourish at the end.

**Scott Power**

*BMD Group Executive Director – Operations*

**BMD Constructions** is a wholly owned subsidiary of the BMD Group and has more than 1700 employees working throughout Australia 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 LAND AND AIRSIDE WORKS WITHIN LIVE, OPERATIONAL ENVIRONMENTS

EXPERIENCED IN  
AIRPORT SECURITY  
PROTOCOLS AND  
COMPLIANCE

SPECIALIST EQUIPMENT TO  
ENABLE SELF-PERFORMANCE  
OF WORKS

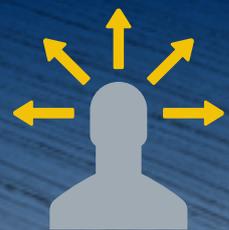
NATIONAL COMPANY — ESTABLISHMENT —  
1979

NETWORK OF KEY SUPPLIERS  
NATIONALLY INCLUDING  
BORAL AND HOLCIM

PROJECT DELIVERY  
EXPERIENCE IN PRIVATE  
AND DEFENCE AIR BASES

# BMD DELIVERS ON

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





# 1 SAFETY, SECURITY AND AIRSIDE MANAGEMENT



# 3 WORKING IN LIVE, OPERATING ENVIRONMENTS



# 2 STAKEHOLDER MANAGEMENT

# 4 SELF-PERFORMING WORKS



# 5 CARE FOR QUALITY



# 6 ENVIRONMENT



# 7 A SELECTION OF RELEVANT EXPERIENCE





OUR EXPERTISE  
AIRPORT INFRASTRUCTURE

# SAFETY, SECURITY AND AIRSIDE MANAGEMENT

**Safety is a non-negotiable priority for BMD, having a Zero Harm policy that is entrenched in our culture.**

BMD also understands the specific safety systems required to manage airside works and our corporate systems have been developed to deliver the highest of standards. BMD has established airside work sites across Australia, engaging with and integrating Airside Operations Officers into our project teams, managing ingress and egress through secure check points and developing specific method of works plans.

## BRISBANE AIRPORT CORPORATION COLLABORATION, QLD

During BMD's tenure at Brisbane Airport, multiple projects and activities were being undertaken onsite at any given time, in a constrained operational environment.

In early 2014, following more than 11 consecutive years working with Brisbane Airport Corporation (BAC), BMD worked with BAC to develop a safety improvement plan (SIP) that was then applied to the four concurrent projects underway.

The BAC SIP detailed actions to align, focus and drive line management while also engaging and motivating the workforce to improve project safety culture and performance to achieve our goal of Zero Harm.

The actions detailed in the plan included:

- nominate BMD representatives to interface with BAC for escalation of safety issues
- establish monthly face to face meetings between BMD and BAC safety representatives
- determine the level of onsite engineering support for all projects
- nominate a single BMD point of contact to liaise with BAC for all upcoming activities, approvals and permit requirements
- determine investigation requirements including full ICAMs in the event of an incident
- utilise BMD's accountability matrix to determine consequences of safety breaches.



The SIP was endorsed by BAC's Senior Management and has been successfully used across airside and landside projects since early 2014. This SIP has resulted in BMD achieving a reduction in total recordable injury frequency rates (TRIFR) as outlined below:

- a TRIFR of 7.83 on Domestic Southern Apron Extension across approximately 255,500 man hours
- a TRIFR of 5.76 for the New Parallel Runway Reclamation works across approximately 173,500 man hours.

As a value-add, BMD also delivered a dedicated BAC safety induction video, which showcased BAC's safety expectations across their operations. The video is now used by BAC as part of their own induction for all contractors.

## SECURITY CERTAINTY

BMD has successfully managed:



**establishing and maintaining site perimeters**



**egress and ingress to airside sites via secure gates**



**utilising Airside Operations Officers for required works**



**vehicular and driver approvals and licences for operating within airports.**

# STAKEHOLDER MANAGEMENT

**BMD works collaboratively with our clients to manage the many and diverse stakeholders involved in airports and their infrastructure. BMD has a robust understanding of the competing priorities and needs of our client's stakeholders in order to mitigate risks, overcome challenges and communicate outcomes.**

## DOMESTIC SOUTHERN APRON, QLD

BMD Constructions was engaged by Brisbane Airport Corporation (BAC) as the head contractor to deliver the \$35 million civil works package for the new Domestic Southern Apron. The project was realised to improve efficiency and capability at the Domestic Airport, requiring the expansion to seven new aircraft bays and upgrades to three existing aircraft bays.

The project saw BMD interface directly with live aircraft bays, taxiways and runways in order to deliver aircraft pavement, relocation of an airside road, realignment of a public road and installation of new services and fuel tanks.

The works required significant stakeholder management to ensure project delivery would not impede airport operations. Stakeholders included various BAC asset management, building commissioner, airside operations and the general public.

BMD instituted regular coordination meetings for each package of works. This ensured all relevant stakeholders were engaged about works specific to their area of interest and promoted the sharing of knowledge and brainstorming to overcome issues.

## KEY OUTCOMES

- Risk workshop held with key BAC departments prior to the start of works to establish lines of communication between BMD and relevant stakeholders.
- No unplanned interruptions to airside operations.
- BMD managed staging of works around operational requirements and requests from BAC and their tenants.
- Dual taxiway commissioning for 15 bays, inclusive of taxiway markings. Bay designation changes were planned and executed over a single night shift with final approval from BAC airside operations as safe for use, minimising the down time for the airport taxiway.





*“BMD has delivered airport projects for Brisbane Airport Corporation for over a decade, demonstrating a genuine commitment to safety, quality, environment and overall project performance.*

*BMD’s strength of relationship with Brisbane Airport Corporation combined with airport environment experience, has allowed for the successful mitigation and planning for any potential project issues.*

*Brisbane Airport Corporation acknowledges BMD’s professionalism and looks forward to maintaining a close working relationship that continues to meet expectations and provide mutual outcomes for all involved.”*

**Robert Scodellaro**  
**Civil Infrastructure Manager**  
**Brisbane Airport Corporation Pty Limited**



# WORKING IN LIVE, OPERATING ENVIRONMENTS



**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.

## **BENDIGO AIRPORT – STAGE 2**

### **BENDIGO, VIC**

During construction of the \$15 million Bendigo Airport – Stage 2 project, constraints were imposed for the existing runway, main apron and taxiway. This included ensuring Runway 17/35, as well as its lighting and guidance systems, remained operational seven days a week, 24 hours a day; unless airport management believed it was able to accommodate the temporary closure of the runway for up to 24 hours or for any time out of normal business hours. Runway 17/35 is used on a daily basis by MyJet charter flights, emergency services, for flight training, by private recreational operators as well as by the Bendigo Flying Club.

Through detailed planning, staging and coordination with airport management, BMD Constructions was able to complete the project without closure of the runway, ensuring operations were never affected.



*“City of Greater Bendigo has been impressed with the highly effective and collaborative BMD team from the beginning of the Bendigo Airport Stage 2 project. It is clear that BMD are focused on developing solid working relationships with their clients, with project outcomes remaining at the forefront of the BMD team’s minds.*

*BMD has placed an emphasis on the importance of the wider project team’s physical and mental welfare. Minimising disruptions to the community has also been a priority for BMD, with issues addressed immediately and without question.*

*With 90% of project staff sourced locally, BMD has actively engaged local subcontractors, consultants and materials to deliver project delivery solutions.*

*In collaboration with key stakeholders, BMD has continuously reviewed the program to find cost and time efficiencies, resulting in positive and original outcomes.*

*BMD started this project with the aim of delivering a quality product for the region and we have been very happy with their work. They have understood and embraced the challenges that come with working in an airside environment and have delivered on their commitment of not significantly impacting airport operations.”*

**Rachel Lee, Former Manager Major Projects  
City of Greater Bendigo**





**VICTORIA INTERNATIONAL CONTAINER TERMINAL**

MELBOURNE, VIC | IN EXCESS OF \$200 MILLION  
VICTORIA INTERNATIONAL CONTAINER TERMINAL LTD (VICT)



**HAY POINT EXPANSION**

MACKAY, QLD | \$175 MILLION  
BM ALLIANCE COAL OPERATIONS PTY LTD AND BECHTEL AUSTRALIA PTY LTD



**DOMESTIC NORTHERN APRON EXPANSION STAGE 2**

BRISBANE, QLD | \$37.8 MILLION  
BRISBANE AIRPORT CORPORATION



**PORT BOTANY CONTAINER TERMINAL EXPANSION**

SYDNEY, NSW | \$57 MILLION  
PATRICK CORPORATION



**DOMESTIC SOUTHERN APRON**

BRISBANE, QLD | \$35 MILLION  
BRISBANE AIRPORT CORPORATION



**DALRYMPLE BAY COAL TERMINAL 7X EXPANSION**

MACKAY, QLD | \$102 MILLION  
DBCT MANAGEMENT PTY LTD



CONSTRUCTION  
STRUCTURE

AND CRUISE

# SELF-PERFORMING WORKS

**BMD is a multi-disciplinary company that can self-perform works, rather than just project manage works undertaken by subcontractors.**

A key aspect of constructing infrastructure within time critical, operational environments, such as airports and ports, is having a depth of understanding about the scope and methodologies required.

Having developed the in-house capability to deliver key components, BMD Constructions deliver detailed scheduling, planning, resourcing and execution of critical activities, as well as early identification and mitigation of associated risks.

## SELF-PERFORMING CONCRETE PAVEMENTS

After completing a number of airside concrete pavement projects utilising subcontractors, BMD recognised the certainty to be gained by controlling the entire process, particularly when tight timelines are crucial.

BMD invested in significant plant and equipment in order to self-perform all associated work including forming, paving, curing, saw-cutting and jointing on airside infrastructure projects.

### KEY OUTCOMES

- More than \$40 million of concrete pavements were constructed at Royal Australian Air Force Base Amberley, under 24 hour shifts, ahead of schedule and with nil re-work.
- Brisbane Airport Corporation declared BMD's self-performance of more than 30,000m<sup>2</sup> of concrete pavements to be the best concrete pavement work seen to date.

### SPECIALIST CONCRETE PAVEMENT EQUIPMENT AVAILABLE FOR AIRSIDE INFRASTRUCTURE WORK INCLUDES:

- steel formwork to suit 400-450 millimetre thick concrete slabs
- concreting bridges and travelling platforms
- vibrating truss screeds
- floor saws to allow self-performance of saw cut joints
- misting/humidity tents to manage environmental concerns such as ambient temperature, wet weather and humidity.



# CARE FOR QUALITY

When working in specialised operational environments including airports, ports and defence facilities, BMD understands the detailed specifications which need to be met in order to deliver the appropriate standard of infrastructure required.

BMD works with our clients to implement processes and systems which guarantee our product is delivered to the highest quality.

## RAAF BASE AMBERLEY – NATIONAL AIRFIELD MAINTENANCE WORKS, QLD

BMD Constructions was engaged to demolish and reconstruct a new runway within a strict eight week program. The working area was constrained to a 450 metre long section, 50 metres wide with no allowance for stockpiling material onsite due to latent ground conditions.

Longstanding supplier, Boral, was engaged to deliver 54,000 tonnes of crushed rock material within a two week window. All materials need to be pre-approved by the designer, prior to being delivered, with a one month lead time on some tests.

Weekly coordination meetings between BMD Constructions and Boral started more than 10 weeks in advance of the works. These meetings meant that the significant challenges associated with the works could be overcome. Those challenges included restrictions to plant operating times at the quarry and stockpiling space constraints while maintaining normal supply to other clients including large Brisbane based BMD projects.

### KEY OUTCOMES



Works were delivered over 14 concurrent days, on 24 hour shifts while ensuring sufficient coverage of senior project personnel to overcome any issues that arose during a shift.



Detailed handover meetings were held between shifts to ensure that the program remained on schedule.



Daily progress reports were provided to the client throughout the 14 days to provide certainty of delivery and confidence in the resumption of normal operations at the base.



Boral supplied up to 6000 tonne of material per day, resulting in 20 truck movements per hour, over two weeks.



Compaction, proof rolling and trimming continued through the night, ready for a further 6000 tonnes to be delivered the following day.



Installation works were completed on schedule and in full compliance with specifications.



# ENVIRONMENT

**Environmental management is a critical aspect to airside works and BMD has a strong reputation for proactively managing risks and working collaboratively with environmental agencies to ensure we meet the associated best practice and legislative requirements.**

BMD is able to manage risks at the source and has developed innovative techniques for managing dust and foreign object debris including temporarily stabilising areas using environmentally friendly, degradable bitumen emulsion.

## **NEW PARALLEL RUNWAY PHASE 1: CIVIL WORKS PACKAGE, QLD**

BMD Constructions was engaged by Brisbane Airport Corporation (BAC) as the head contractor to deliver the \$46 million Phase 1 Civil Works Package for the New Parallel Runway (NPR) at the Brisbane Airport.

Preparation activities undertaken by BMD onsite included:

- 360 hectares of clearing fill and pavements for access roads
- modifications to the cross runway system
- establishment of a new grassland sanctuary for a 'near threatened' bird species
- construction of a new drainage network including a floodway drain and outlet into Kedron Brook Floodway
- excavation and treatment of over 300,000m<sup>2</sup> of acid sulphate soils.

Works undertaken landside were nestled between a number of environmentally sensitive areas including BAC's adjacent Biodiversity Zone, Moreton Bay Marine Park and nearby Boondall Wetlands and Moreton Bay, and a number of risks and impacts had to be managed and mitigated in order to safely deliver the project within the neighbouring environment. These included unpredictable ground conditions, widespread flooding rain and groundwater issues.

## **KEY OUTCOMES**

- **Winner of the Environmental Award at the 2014 QLD Engineers Australia Excellence Awards in a joint submission with BAC.**
- **Utilised existing fire tracks and old roads instead of building a new network.**
- **Rehabilitation and re-release back onto airport land of Lewin's Rail – a small bird listed as a threatened species in Queensland under the Nature Conservation Act 1992.**
- **Inspired approach to protecting the Lewin's Rail by playing call backs (sound of the bird's call) prior to works commencing each day to ensure areas were clear of the species.**
- **Installation of innovative temporary fauna bridges to allow animals to pass over water channels during clearing.**
- **Artificial flushing of tidal channels that were temporarily closed for construction works, to keep mangroves and vegetation alive.**
- **Installation of significant erosion and sediment controls, including 15,000 metres of sediment fencing to protect tributaries within the site, Kedron Brook Floodway and Moreton Bay.**





OUR EXPERTISE  
AIRPORT INFRASTRUCTURE



**NEW PARALLEL RUNWAY PHASE 2  
AIRFIELD WORKS  
IN 50:50 JOINT VENTURE WITH  
CPB CONTRACTORS**

BRISBANE, QLD | \$400 MILLION  
BRISBANE AIRPORT CORPORATION



**BRISBANE AIRPORT INTERNATIONAL  
TERMINAL APRON EXPANSION**

BRISBANE, QLD | \$29 MILLION  
BRISBANE AIRPORT CORPORATION



**RAAF BASE AMBERLEY –  
NATIONAL AIRFIELD MAINTENANCE**

AMBERLEY, QLD | \$35 MILLION  
DEPARTMENT OF DEFENCE

# THE BMD EXPERIENCE



## TOWNSVILLE AIRPORT REDEVELOPMENT

TOWNSVILLE, QLD | \$10 MILLION

[TOWNSVILLE AIRPORT](#)



## KANGAROO ISLAND AIRPORT UPGRADE – AIRSIDE A.2 – RUNWAY OVERLAY AND EXTENSION

KANGAROO ISLAND, SA | \$7.5 MILLION

[KANGAROO ISLAND COUNCIL](#)



SYDNEY, NSW

[SYDNEY AIRPORT CORPORATION LIMITED](#)



SYDNEY, NSW

[SYDNEY AIRPORT CORPORATION LIMITED](#)



SYDNEY, NSW

[SYDNEY AIRPORT CORPORATION LIMITED](#)



BUSSETON, WA | \$1 MILLION

[CITY OF BUSSETON](#)



TULLAMARINE, VIC | \$5.4 MILLION

[AUSTRALIAN PACIFIC AIRPORTS MELBOURNE](#)



BRISBANE, QLD | \$3.7 MILLION

[BRISBANE AIRPORT CORPORATION](#)



DARWIN, NT | \$2.1 MILLION

[DARWIN INTERNATIONAL AIRPORT](#)



**BMD**  
constructions

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