

Capability Statement



JBU Group delivers multidisciplinary engineering and design services for mining, infrastructure, and industrial projects, with a focus on constructability, regulated infrastructure, approvals support, and delivery within operational brownfield environments.

- ✓ Brisbane-based Australian consultancy
- ✓ RPEQ and NER registered engineers
- ✓ ISO 9001 certified (Citation Certification)
- ✓ In-house engineering, design and drafting delivery - no offshoring

Company Overview

JBU Group is a privately owned Australian firm based in Brisbane, specialising in engineering and design services for the private and public sectors. We have extensive experience delivering engineering services across mining, infrastructure, and industrial projects, including brownfield and greenfield environments, from early planning through to construction support and closure-related works.

JBU Group combines practical project delivery experience with engineering governance, digital coordination, and constructability-focused design to support efficient project execution.

Why Clients Engage JBU?



Innovation

We embrace the latest technologies and best practices to drive innovation in our solutions



Client-Centric

Our collaborative approach ensures that client goals and vision remain at the forefront of every decision



Sustainability

We prioritise environmentally responsible practices in our designs and solutions



Industry Knowledge

Over 150 years of combined industry experience across mining, infrastructure and industrial sectors



Proven Track Record

Proven track record of delivering successful projects across diverse industries.



Quality

Our services are delivered under an ISO 9001-certified QMS system and supported by RPEQ sign-off and certification where required.



In-House Delivery

All engineering, design, and drafting are delivered by JBU's Australian-based in-house team, providing direct coordination, controlled quality, and confidentiality across all project phases.

Our Clients

JBU Group provides engineering and design services directly to mining principals, EPCMs, contractors, and infrastructure clients across Australia.:

Glencore

QCoal Group

South32

MACH Energy

Multicom

North West

Phosphate

Ammjohn

ABx Group

Kestrel Coal

CORE Lithium

Stanmore

Evolution Mining

GM3

Senversa

Suncable

Waterline

Strategic Minerals Corporation



GOVERNANCE, COMPLIANCE & DELIVERY ASSURANCE

JBU Group maintains robust governance and quality controls to support safe, compliant, and reliable delivery across mining, infrastructure, and industrial projects.

Quality Management System

Engineering and design services are delivered under JBU Group's ISO 9001-certified Quality Management System, certified by Citation Certification, supporting consistent and auditable project delivery.

Engineering Governance and Accountability

All engineering deliverables are developed and reviewed under defined internal processes, with NER/RPEQ registered engineers accountable for certification and sign-off.

Regulated Infrastructure and Approvals

JBU Group leads engineering design and approval support activities for regulated dam structures, providing engineering accountability through assessment, design development, regulator engagement support, and NER/RPEQ certification.

Operational Brownfield Delivery

JBU Group regularly delivers engineering within operational mining and industrial environments where constructability, staging, operational continuity, and interface management are critical project considerations.

In-House Australian Delivery

All engineering, design, and drafting services are delivered by JBU's in-house Australian-based team, with no offshoring, ensuring direct coordination, controlled quality, confidentiality, and responsive project delivery..

Construction Phase Assurance

JBU Group supports construction delivery through inspection, verification, and certification activities, including construction inspections, compliance reporting, and RPEQ construction certification, where applicable.

DIGITAL ENGINEERING & INFORMATION MANAGEMENT

JBU Group applies digital engineering and information management to support coordinated, constructable, and risk-aware delivery across mining, infrastructure, and industrial projects.

Integrated Digital Delivery

Digital engineering supports multidisciplinary coordination across all disciplines, improving constructability review, interface management, and alignment between design, approvals, and construction activities.

Common Data Environments (CDEs)

JBU Group utilises Forma Data Management as its primary digital delivery platform and is experienced in working within both JBU-hosted and client-hosted common data environments, ensuring seamless integration with EPCM and Principal systems.

Information Management Alignment

JBU's digital delivery processes are aligned with the ISO 19650 series for information management, supporting controlled document management, model coordination, version control, and traceability across the project lifecycle.

Model-Based Design and Coordination

We develop and manage discipline-specific and coordinated 3D models to support design development, clash identification, constructability review, and interface management, particularly for complex or constrained sites.

Construction and Approvals Support

Digital models and information sets are developed to directly support construction sequencing, temporary works planning, and regulatory approvals, including visualisation and data outputs suitable for stakeholder and regulator engagement.

Controlled Information Exchange

JBU Group applies defined information exchange protocols to ensure that models, drawings, and technical data issued to clients, contractors, and external stakeholders are accurate, up to date, and fit for purpose.

CIVIL/STRUCTURAL ENGINEERING AND DESIGN

JBU Group delivers civil and structural engineering services for mining, infrastructure, and industrial projects, with a focus on constructability, operational brownfield delivery, regulated infrastructure, and coordinated multidisciplinary execution.

General Earthworks and Site Grading

JBU Group provides earthworks and site development design for mining and infrastructure projects, including operational and staged construction environments. Services include:

- ✓ Site grading and pad works
- ✓ Bulk and detailed earthworks design
- ✓ Material Movement optimisation
- ✓ Sediment and erosion control plans
- ✓ Drainage embankments and diversion bunds
- ✓ Rail earthwork and drainage
- ✓ Surface Water Management integration
- ✓ 3D Modelling and drafting

Water Management Structures Design

JBU Group delivers engineering design and assessment services for water management infrastructure supporting mining and industrial operations. Services include:

- ✓ Earth basins and water storages
- ✓ Lead engineering design, assessment, and approval support activities for regulated dam structures (dams and levees), including RPEQ certification.
- ✓ Spillways, outlet structures, and inlet channels
- ✓ Sediment basins and sediment dams
- ✓ Clean water diversions and runoff management systems
- ✓ Open channel drainage infrastructure
- ✓ Floodways, culverts, and road drainage systems
- ✓ Stormwater management planning
- ✓ RPEQ certification and approvals support, where applicable

Road Infrastructure

JBU Group provides planning, assessment, and design services for mining and infrastructure road networks, including temporary, permanent, and operational access systems. Services include:

- ✓ Public and private road design
- ✓ Mining haul road design

- ✓ Pavement design
- ✓ Road drainage integration
- ✓ Seal design
- ✓ Swept path assessment and vehicle access analysis
- ✓ Traffic flow planning
- ✓ Signage and line marking design
- ✓ Road impact and road safety assessments
- ✓ TMR prequalification support (HE1/DE1)

Mine Closure Studies*

JBU Group supports mine closure studies and broader PRCP programs through the delivery of specialist civil, landform, flood, and water management engineering components. Services include:

- ✓ Landform and drainage design
- ✓ Flood and hydrological modelling
- ✓ Surface water management strategies
- ✓ Rehabilitation earthworks planning
- ✓ Existing infrastructure assessment
- ✓ Surface hydrology assessment and design
- ✓ Risk assessment participation and technical support
- ✓ 3D visualisation to support stakeholder engagement and project communication

** Selected specialist services are delivered in collaboration with specialist subconsultants where required.*

Structural Engineering and Design

JBU Group provides structural engineering design, assessment, and certification services for mining, infrastructure, and industrial projects. Services include:

- ✓ Reinforced concrete structures
- ✓ Foundations, footings, and slabs
- ✓ Structural steel design
- ✓ Structural assessments and technical reviews
- ✓ Design documentation and certification support

MECHANICAL ENGINEERING AND DESIGN

JBU Group delivers mechanical engineering and design services supporting mining, industrial, and infrastructure operations, with a focus on practical, fit-for-purpose solutions aligned with operational and constructability requirements.

Mechanical Designs

Mechanical engineering services include:

- ✓ Mechanical infrastructure and plant modification design
- ✓ Fabricated component and assembly design
- ✓ Piping and mechanical system layouts
- ✓ Plant interface coordination
- ✓ Sheet metal and fabricated structure detailing
- ✓ CAD modelling and design development

Pumps and Piping Solutions

JBU Group provides design and assessment services for water and slurry systems across mining and industrial environments. Services include:

- ✓ Pump sizing and specification
- ✓ Pipeline sizing and hydraulic assessment
- ✓ Water and slurry system assessment
- ✓ Existing pipeline verification
- ✓ Hydraulic system simulation and review

Materials Handling Solutions

Services include:

- ✓ Conveyor system assessment and sizing
- ✓ Conveyor capacity review
- ✓ Chute and bin flow assessment
- ✓ Materials handling optimisation studies
- ✓ Bulk materials characterisation coordination with specialist providers where required

Engineering Simulations and Analysis

JBU Group undertakes engineering simulation and analytical assessments to support operational performance and engineering decision-making. Capabilities include:

- ✓ Hydraulic and piping simulations
- ✓ Mine water management simulations

- ✓ Pump control and operational scenario modelling
- ✓ Finite Element Analysis (FEA)
- ✓ Operational and workflow scenario modelling

Safety Audits

JBU Group performs engineering safety reviews and assessments for industrial and mining infrastructure in accordance with applicable Australian Standards and operational requirements.

Services include:

- ✓ Conveyor guarding and access reviews
- ✓ Safety compliance assessments
- ✓ Operational risk reviews
- ✓ Engineering compliance inspections



PROJECT AND CONSTRUCTION SUPPORT

JBU Group provides project engineering and construction support services to assist clients during construction, commissioning, and operational project delivery.

Project and Construction Technical Support

We can assist clients with technical support throughout the project lifecycle to support responsive technical decision-making during construction and operational project delivery, including:

- ✓ Project Engineering Support
- ✓ Brownfield and operational construction staging support
- ✓ Temporary works coordination
- ✓ Site-based engineering support
- ✓ Construction RFIs and technical query responses
- ✓ Material take-offs and quantity verification
- ✓ Technical coordination during construction delivery
- ✓ Construction-focused 3D models and visualisation

Construction Inspections and Assurance

JBU Group supports construction quality and compliance activities through inspection, verification, and certification services. Services include:

- ✓ Quality Management Planning and Reviews
- ✓ Construction Testing Plans (ITPs)
- ✓ Onsite Inspections
- ✓ Inspection Reports
- ✓ RPEQ Construction Certification Signoff

Constructability Reviews

JBU Group undertakes constructability and engineering reviews to support safe, efficient, and practical project execution. Services include:

- ✓ Independent Design Constructability Reviews
- ✓ Client-Side Construction Standards Reviews
- ✓ Early Works and Construction Design Staging Reviews
- ✓ Providing Detailed Constructability Reports and Plans

DOCUMENTATION AND VISUALISATION

JBU Group develops coordinated engineering documentation and digital models to support design development, construction delivery, approvals processes, and stakeholder communication.

Engineering Documentation

Documentation services include:

- ✓ Technical and engineering reports
- ✓ Engineering management plans
- ✓ Construction scopes of work
- ✓ Technical specifications
- ✓ Material take-offs
- ✓ Geotechnical and survey scopes
- ✓ Design and construction documentation packages

Design Documentation

JBU Group develops coordinated 2D and 3D engineering documentation from concept through to detailed and construction design. Services include:

- ✓ Concept design documentation
- ✓ Detailed engineering drawings
- ✓ Coordinated 3D design models
- ✓ BIM-compatible models
- ✓ Construction issue documentation
- ✓ Multidisciplinary design coordination

3D Model Visualisation

JBU Group develops coordinated 2D and 3D engineering documentation from concept through to detailed and construction design. Services include:

- ✓ Concept design documentation
- ✓ Detailed engineering drawings
- ✓ Coordinated 3D design models
- ✓ BIM-compatible models
- ✓ Construction issue documentation
- ✓ Multidisciplinary design coordination

